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**The bread-making sector in the Veneto Region:
traditions and development outlooks**

Supervisor

Ch. Prof. Christine Mauracher

Graduand

Aurora Fantin

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863512

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INTRODUCTION

The world of artisan bakeries is a sector, within the Italian economy, is rarely considered for research purposes and is hardly taken as a best practice in the context of managerial studies. However, its value at a national level remains important, with overall revenues in 2019 worth 7 736 801 thousand euros in 2019 and employing almost 130 thousand people¹ (ISTAT, 2019). Also, it is a sector that has been deeply changing in the last few decades, witnessing new habits of consumption and modifications in production as well.

Given these premises and under the request of one historical firm that operates in this industry, we have decided to investigate how these firms are approaching this evolution path. The major focus and interest are specifically in the Veneto Region enterprises, with the aim of identifying the state of the art, understanding the main drivers behind this market and providing some possible outlooks for the future. This goal will be achieved using a Delphi investigation as a tool for carrying out an empirical analysis, based on the assessment and valuation of several aspects of these firms by some chosen experts.

In Chapter 1, a market analysis will be presented, divided into two different geographical sections, namely one for Italy as a whole and another for the precise context of Veneto Region. This analysis will go through consumption and production patterns, considering then prices and international trade for both the geographical point of views. A final reflection will be made on current geopolitical situations affecting some of the market dynamics.

¹ These values are including economic activities classified under the ATECO code 1071: production of bread and of fresh bakery products.

In Chapter 2, a brief literature review will be proposed, approaching first consumption patterns and then choices concerning prices.

Finally, Chapter 3 will be the core of the present thesis, as it will include all the empirical considerations that have been collected and elaborated, based on the application of the Delphi Method for research: some stakeholders of the sector, from different cities of the Region, are interviewed and asked to provide a numerical valuation on several aspects that make up a SWOT analysis. The purpose is to understand which are the major strengths and weaknesses, opportunities and threats for artisan bakery firms. In addition, for some of the items considered, some hints for reflection and improvement will be provided as suggestions for the renewal of this type of business, which is, unfortunately, often thought of as a static and old reality.

I. THE MARKET FOR BREAD IN ITALY AND IN THE VENETO REGION

1.1. Introduction

Bread is a traditional and simple food, daily consumed in most families in Italy. According to the Italian law, “bread is a product deriving from the partial or total cooking of a leavened dough made of wheat flour, water and yeast, with or without added salt” (Art 14, co. 1, 4 Luglio 1967, n.580). In order to understand the state of the art of this economic sector in Italy and in the more delimited area of Veneto Region, which is the focus of this study, it is worth investigating patterns of consumption and of production, with the purpose of acquiring an economic picture of this market and to be able to make some valuations about it.

The chapter begins with an analysis of the bread market at a national level, going through consumption, production, prices and international trade. The same path is then followed to get a picture of it in the Veneto Region only.

1.2. Bread and bakery market in Italy

1.2.1. Consumption

In the context of the so-called “Mediterranean diet”, national guidelines and nutrition experts recommend the consumption of a quantity of bread ranging from 100 to 250 grams each day (Camilli et al., 2017) . While we have data reporting that in the last decades of the 1800s people used to eat on average 230 grams of bread per day, the quantity consumed these days, as measured by Coldiretti in 2016, does not even reach the minimum amount of 100, but rather it stops at 85 grams per day. In effect, it seems from statistics that, as we move into our contemporaneity, people tend to eat less and less bread: during 1990s, the average daily consumption was roughly 200 grams, with a decreasing trend in the next decades: during 2000s, people used to eat 180 grams of bread each day, with a clear decline in 2010, when an average consumption of 120 grams was registered (Coldiretti, 2016).

To have a quick term of comparison, Italy is also one of the countries in Europe where people eat the least bread: according to AIBI Bread Market (2015), the average bread consumption in 2015 in Europe was equal to 59 kilograms per capita in a year. In Italy, it was 41 kilos instead, while Eastern Europe countries, such as Bulgaria and Romania, are those where people eat bread the most, with consumed amounts equal to 95 and 88 annual kilograms respectively. However, an explanation to this may also be found in the fact that the price of cereals and of flour in these countries are low if compared to the ones of Western and Central Europe.

In 2020, Italmopa conducted a survey whose results showed that 84% of interviewees (all Italians) declared that they were consuming bread with a daily frequency. Among them, some consumption preferences were revealed: 72% preferred traditional white-flour bread, while the remaining 28% claimed they better enjoyed wholegrain bread, with this latter category growing year by year. This latter point was confirmed also by another multichoice survey conducted by the same institution, according to which almost three quarters of participants still declared to be preferring white bread, but a more relevant 39% answered to be keener on eating wholegrain bread. Although in a minor but still relevant percentage, 24% of respondents claimed to prefer multicereal bread and a further 28% semolina bread.

According to Esselunga bakery manager Giuseppe Ferrandi, we can classify the bread that is typically bought in large-scale retail channels in two groups: half of it is 00-white-flour bread, while the remaining 50% is wholegrain bread or bread from less refined flours (e.g., bread made of type-1 and type-2 flours). He also reported that there is a growing inclination towards bread from alternative and pseudo-cereals, such as rye and oat; also, consumers are more attracted to breads having some positive health effects, for instance less salty breads or those with precious additives such as beta glucans or vitamins.

All these data therefore show that people are more and more aware of all the bread alternatives that are offered by the market nowadays, that they are trying to vary their dietary habits and, finally, that they are more careful about to health concerns than they used to be in the past. Anyways, the bread market in Italy at present remains largely based on the consumption of the simplest and most traditional white bread, which in fact continues to be the most bought one.

On the other hand, 16% of interviewees declared not to be consuming bread as a habit. Most of them said that this choice was driven by dietary and/or health reasons. In effect, a widespread “carbophobia” has been impacting the choice of whether to consume bread (but the same reasoning is also valid for pasta and for other foods rich in carbohydrates), as it is commonly believed to be a fattening food, being this idea largely fed by a severe amount of fake news circulating about this matter. Moreover, it seems that there is some confusion about whether bread is good for health or not, due to the lack of appropriate scientific communication, leading some people to consume it with care. Among the other reasons why people do not eat bread, there is a growing share of population that suffers from the celiac disease (around 1% of the Italian population, with the number of new diagnoses growing year by year, as reported in De Stefano et al., 2019) or that has developed some other forms of gluten intolerance, which is the most widespread among intolerances.

Moving then to what are the expected patterns for the future of bread consumption, Infofarine (2019) estimates that people in the future are expected to consume larger quantities of organic products, of bread from ancient grains and of bread from stone-ground flour; also, consumers will be likely to pay more attention to the country of origin of grains, trying to consume more bread made from Italian grains and from local productions.

To this regard, according to AIBI (2020), the Covid-19 pandemics may leave its legacy also on this field: during government-imposed lockdowns in 2020, bread, pizza and similar bakery products regained importance for a relevant number of

Italian households: while someone started to bake their own bread at home, somebody else gave new chances to small bakeries within their villages, which had previously been forgotten due to the typical urgencies of everyday life. Whether people will be willing or not to keep kneading at home, for sure those months spent at home have represented an opportunity to re-discover the genuineness of fresh artisanal bread.

In 2020, ISMEA reported a decrease in the demand for bread equal to 8% with respect to the previous year; after the outbreak of the disease, the purchases of flours and semolas by households suddenly grew, moved by the necessity of people to create their own stock at home as a reaction to the uncertainty of that period. In 2021, when the situation went back to normal, data suggests that while the demand for pasta, flour and semolas has gone back to pre-pandemic levels, the demand for bread keeps higher than what it was before Covid, registering +9,9% with respect to 2020.

According to ISTAT, families spend on average 22€ per month on bread. However, this item of expenditure has been following a decreasing trend from 2014 (-5,69% from 2014 to 2020), thus confirming the decreasing demand for bread products. On the contrary, people are spending more on flour and on other bakery products.

1.2.2. Production

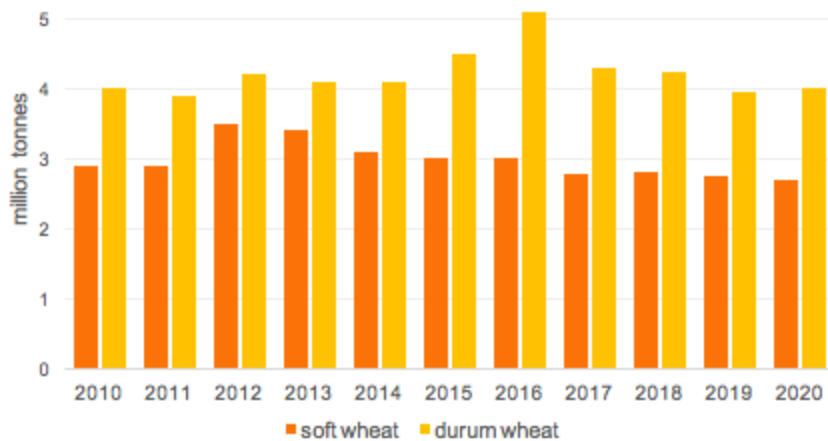
Moving to the production side of the market, we shall start the analysis by briefly describing how the bread supply chain works. At its basis, we can find farmers involved in the cultivation of wheat and their stock centers, selling the most essential raw material for bread-making to the milling industry. Mills, afterwards, are responsible for the milling of grains to produce flours. Bakeries (both artisanal and industrial) buy flour from mills through a differentiated network of distributors and intermediaries; eventually, they are ready to produce bread and other related

products, which then will be sold, either directly or through the large-scale retail distribution in supermarkets and in superstores.

1.2.2.1. Grains

As far as the first step of the supply chain is concerned, we shall make a distinction between soft and durum wheat: while the production of the former has been constantly decreasing since 2012, the latter does not present any precise trend, but a peak can be signaled in 2016, as we can see in Graph 1.1 (ISMEA, 2019).

Graph 1.1 Wheat production in Italy (2010-2020)



Source: elaboration on ISMEA

The most suitable type of wheat for bread production is soft wheat: in Italy, in the last decade, these crops produced a quantity of roughly 3 million tonnes per year. Durum wheat, on the contrary, is only marginally used in the bread industry, rather it is mostly addressed to the pasta one; Actually, durum wheat is the most abundant quality of wheat in Italy, with an average national production of 4,2 million tonnes considering the years from 2010 to 2020.

ISMEA suggests that the main drivers determining the quantity of wheat that is produced each year is the number of available lands suitable for wheat crops, as the yield is quite constant in years, being around 51 q/ha (ISMEA, 2016).

For what concerns the production of soft wheat in Italy, the most productive regions are Emilia-Romagna and Veneto, with a production, in 2020, of respectively 884 and 549 thousand tonnes. On the other hand, durum wheat is more suitable to be grown in the milder temperatures of Southern Italy, with Puglia and Sicily as the most productive regions, with respectively 950 and 719 thousand tonnes grown in 2020 (ISMEA, 2020). In 2018, firms operating in the agricultural sector of wheat production were 311.018, of which 55% worked with durum wheat only (ISMEA, 2020).

1.2.2.2. Mills

In 2020, in Italy, there were a total of 296 mills, of which 131 concentrated in Northern Italy. In 2019, they transformed about 14 million tonnes of grains, producing 4 million tonnes of soft-wheat flour (85% of which was destined to the bread industry) and another 4 million tonnes of semola mainly for the pasta industry (only 5% of it is estimated to be used by bakeries) (Italmopa, 2020).

The national milling industry is reported to produce revenues for about 3,5 billion euros each year; in particular, large mills² have on average revenues for 51,8 million euros, while small mills³ have an average revenue of 13,7 million euros. Typically, the formers tend to sell their flour to industrial bakeries operating on large scales or in the large-scale retail trade, while the latter are keener on selling directly to small and artisan bakeries (ISMEA 2019).

² They can transform more than 200 tonnes of grains in 24 hours.

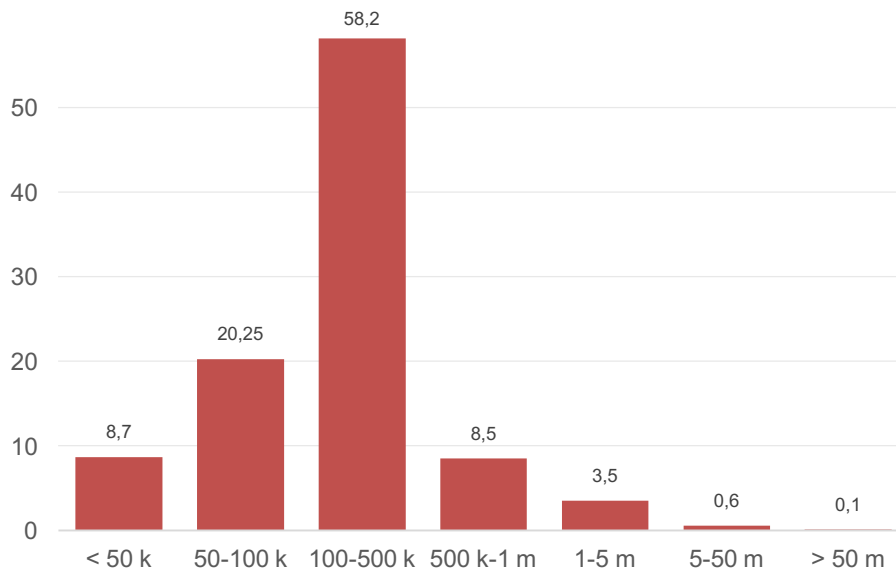
³ They can transform less than 200 tonnes of grains in 24 hours.

1.2.2.3. Bakeries

According to research conducted by Assipan, in Italy, in 2020, the bread-making industry was composed of 43.937 firms, of which 33.743 worked in the real context of bread production, and the remaining 9.194 in the segment of the bread retail system. Another source for these data is ISTAT, which, in 2019, reported the presence of 23.636 firms involved in the production of bread and of other 7.829 firms having a business in the retail distribution of bread.

Regardless of the precise number, most of these firms are small firms (majorly sole proprietorships) and the large companies make up only 0,48% of the total. As we can see from Graph 1.2, more than a half of these companies have revenues ranging from 100 to 500 thousand euros, while a significant 29% do not even achieve 100 thousand euros. Only 4% of them have revenues greater than 1 million euros (Assipan, 2020).

Graph 1.2 Revenues distribution



Source: Assipan

This industry gives a job to a total of 125.993 people, considering that 93% of these firms employ less than 10 people, thus confirming the typical small size of

these firms. Since they are not structured firms, but rather they are local businesses run by families whose only source of income is sales, it is not a surprise that they may have some financial issues, having sometimes to struggle for survival. To this regard, on the one hand there are some historical bakeries that have been existing for a long time and that have been able to go through different generations of families, but they are only a restricted minority. In fact, on the other side, the average longevity for these companies is 15 years and 8 months (Assipan, 2020), meaning that most of them have a relatively short life.

1.2.3. Pricing

When talking about prices in the bread supply chain, it is appropriate to distinguish the different phases of pricing according to the different steps we have previously described. Therefore, we are considering origin prices of the wheat grains, wholesale prices for flour and finally retail prices for bread.

1.2.3.1. Origin prices of wheat grains

As many other raw materials, wheat is a listed commodity so its price is subject to international events and to the performances achieved abroad; sometimes it may also be impacted by speculation from investors. Considering soft wheat only, in Italy the number of imports is much higher than what is nationally produced, meaning that its price surely depends on international prices. This feature is confirmed by the fact that the price of national wheat is always following the same path of the price of foreign wheat: when we observe increases in the price of foreign wheat, the national one grows and vice versa.

If we analyze the trend in wheat prices from 2007 onwards, we can immediately notice that it is characterized by significant fluctuations. Most of these fluctuations depend on the quantity and quality of the wheat produced, but also on other countries' provisions: these latter may be impacted by a disequilibrium between

international demand and supply of wheat, which may easily change their consistency.

Going into deeper details, the most important peaks in prices of soft wheat were registered in the first part of 2008, at the end of 2010, in the second half of 2012 and in 2021, as described by Graph 1.3. The peaks of 2008 to 2012, in Italy, were connected to a profound contraction of the national production (about -8%) (ISMEA, 2019); during 2021, a new peak in the price of wheat manifested, bringing it back to levels we had not seen since 2008. It seems that the most impacting cause for this sudden rise of prices is to be found in the consequences of the Covid-19 pandemics, which caused a crisis in the global supply chain in every economic activity field, due to borders restrictions and quarantine measures. As a result, there was a massive slowing down of delivery timings and considerable increases of transport costs.

Graph 1.3 Price of national soft wheat, 2008-2021



Source: ISMEA

1.2.3.2. Wholesale prices of flour

Wholesale prices of flour generally follow the same trend of grains prices, so the registered variations in its prices are to be attributed to the same events causing fluctuations in origin prices of grain.

1.2.3.3. Retail prices of bread

Retail prices of bread are variable, depending on the city where it is sold (Milan is the most expensive, while Napoli the cheapest) and on the specific type of bread, which can be more or less simple and therefore more or less expensive. The average price of bread in the last decade has always been fluctuating around the amount of 3 euros per kilo, in particular it was equal to 3,19 euros in 2019 (ISMEA, 2019). The price of bread in recent years has been subject to a slow but constant increase, meaning that it is becoming more and more expensive and that we expect it to furtherly rise in the next years. However, its price is not exposed to the same fluctuations that are registered in the wheat market, meaning that the cost of raw materials is not the first determinant for the final price of bread. This is also a consequence of the normalization of final prices operated by the distribution sector, with the aim of protecting consumers from sudden price oscillations occurring in markets.

1.2.4. International trade

When considering commercial exchanges with other countries, we must break down import and export of grains from import and exports of bread and other bakery products.

1.2.4.1. Import and export of grains

As far as wheat grains are concerned, Italy is heavily dependent on imports from abroad, as the national production of soft wheat is not sufficient to satisfy the demand from the national milling industry. If we consider years from 2008 to

2020, we cannot identify any constant pattern for import and exports of wheat: 2009 was the year with the lowest imports, whose value was equal to € 724 millions, while 2011 was the year when imports had their highest value, worth €1.249 millions. However, these values are influenced by the prices of grains, meaning that higher values may be due to higher prices rather than to a higher quantity of materials traded. In effect, if we consider quantities rather than the economic value of wheat, we can learn that the least imported quantity was in 2008, with an amount of around 3,9 million tonnes; the highest peak was in 2018 instead, when the price of wheat was low, and the quantity imported corresponded to 5,6 million tonnes (ISMEA, 2021). On the other hand, exports of this commodity are insignificant for Italy, amounting only to around 2,9% of the value of imports. Therefore, we can be sure that the balance of trade for soft wheat is negative, presenting an average value of -945 million euros during the analyzed period. The largest amount of wheat imports come from the European Union, particularly from Hungary, France, Bulgaria and Austria. Regarding non-European commercial partners, Italy imports wheat primarily from Canada and from the United States (ISMEA, 2021).

1.2.4.2. Import and export of bread and similar products

Moving to international trade of bread and its substitutes, imports and exports have significantly increased from 2008 to 2020: the former have risen by 135% and the latter have grown approximately by 197%. In effect, bread exports in 2008 were worth € 80 millions, while in 2020 their value reached almost € 240 millions; on the other hand, exports were worth €67 millions in 2008, while they accounted for € 157 millions in 2020 (ISMEA, 2021). As we can deduct from this data, the trade balance for exchanges of bread is positive, amounting to €83 million in 2020, and it has always been so within the range of years we have considered.

Nevertheless, if we look at the quantity of the traded items rather than at their economic value, we can learn that, in 2020, the trade balance is negative for an amount of almost 18 thousands of tonnes, being this value highly influenced by

the quantities of bread that is imported from Germany *in primis*⁴, but also from Austria and Belgium.

Most of Italy's commercial exchanges in this sector occur within the European Union: in 2020, 17% of total exports and only 3% of total imports were carried out in an extra-European country. It follows that the most important trade partners are EU countries: as far as exports are concerned, the worthiest exchanges are those with France and Germany, followed by Spain and the UK. The quantity of bread exported to the US is also relevant, with a value close to the amount exported to France (around €25 millions). Although with a more insignificant quote, the other non-EU countries to be mentioned are Japan, Canada, Brazil and Israel. Moving to imports, the most valuable are clearly those from Germany, coming with a value of €65 millions. They are followed by France and Spain, whose values are not even one third of the German ones. Imports from other non-European countries are overall irrelevant, but the major players are Israel and China (ISMEA, 2021).

1.3. Bread and bakery market in the Veneto Region

1.3.1. Consumption

Moving the analysis to the more restricted focus of the Veneto Region only, the average monthly expense in bread and cereals⁵ for each household was equal to 75,83 euros in the North-East of Italy, this data being slightly less than the

⁴ Germany, besides being the most important commercial partner for Italy in most economic sectors, is a country where wheat crops are the primary product of agriculture, meaning that it is able to export large amounts of its related products.

⁵ This category includes any cereal-related product and not only bread: it is important to be aware of the fact that bread typically corresponds to less than one third of this category. However, while precise data on bread only are available for Italy, it is not possible to find them concerning only Veneto Region.

Italian average (€ 76,08) (ISTAT, 2021). Considering the past five years, namely from 2015 to 2020, this number has been barely decreasing, revealing a small reduction of 1,4%, in accordance with the already mentioned phenomenon concerning the fact that people tend to eat less bread.

This trend is further confirmed by looking at the number of people aged 3+ that eat bread and pasta at least once per day: in 2020, this quantity amounted to 3,370 millions of people, out of a population of 4.896.830⁶ people (68% of the population) (ISTAT, 2021). This proportion is lower than what happens at the national level, where this percentage amounts to 74%. The fact that Veneto is more subject to diminishing consumption of bread is also confirmed by analyzing the historical trend of people that consume bread and pasta at least once a year, in the years from 2005 to 2020. On average, in 2005, 86,9 people out of 100 used to daily consume these foods, while in 2020 this number stopped at 70. This data is to be compared with the Italian aggregate results, corresponding to 87,1 and 76,1 respectively: this demonstrates that the drop in consumption has been steeper for Veneto than for Italy.

1.3.2. Production

With the aim of studying the supply side of the bread industry, we can learn from Infocamere that, in 2020, there were 1.736 firms operating in the bread sector⁷ in Veneto. To cite another source of data, the last available ISTAT census of 2011 reported that the number of firms operating in the production of bakery products were 2.200.

If we consider the number of firms for the years 2015 to 2020, we can see that, overall, they have decreased by 6,4%, with small but constant decreases of 1,3%

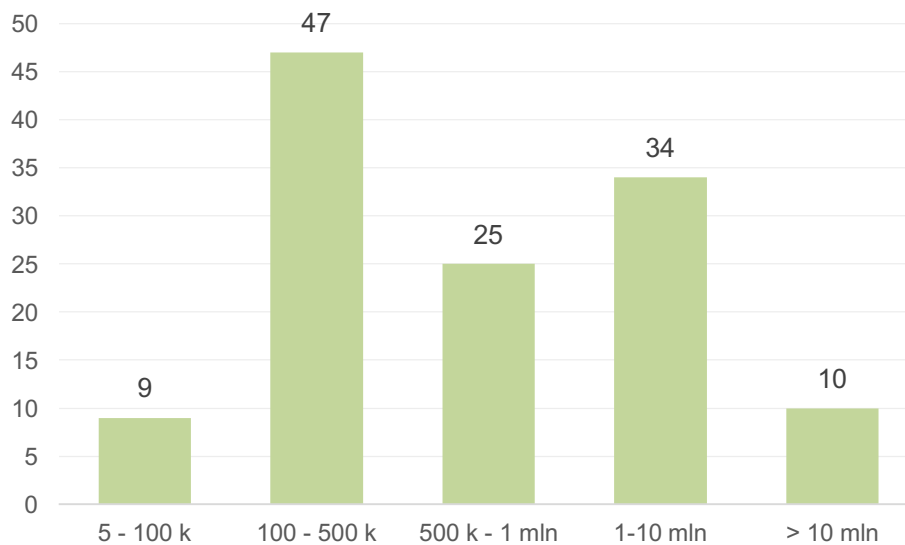
⁶ Data from Istat at 31st December 2020, validation in progress.

⁷ (Ateco code 10.71, thus also including pastry-shops)

year by year. In particular, the year from 2018 to 2019 was the most tragic from this point of view, with 33 bakeries shutdowns.

The bread-making industry in Veneto is largely composed of firms by small individual firms or by partnerships, being often family businesses. However, from a sample of the first 127⁸ Most important firms, we could identify that 122 of them are limited companies, the majority under the form of Italian “SRL”. To give a measure of their revenues, only 10 of these companies had, in 2020, revenues higher than €10 millions, including the two famous Morato Pane SPA and Roberto Industria Alimentare SRL, which had revenues higher than €50 millions. As we can see from Graph 1.4, most of the firms in the sample generate revenues for an amount ranging from 100 to 500 thousand euros, meaning that they are overall small businesses.

Graph 1.4 Distribution of revenues in Veneto, 2020

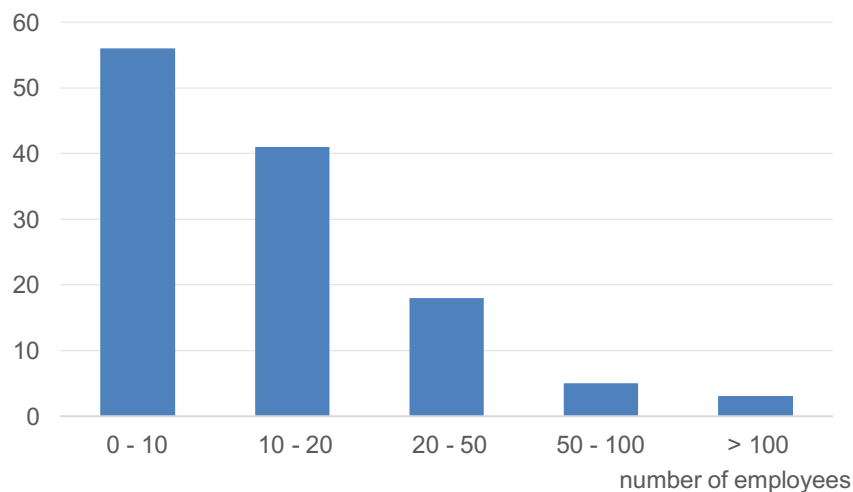


Source: elaboration from AIDA

⁸ Extraction at January 2022 from AIDA, according to criteria of Ateco Code and Region in which they are located.

Considering then the average number of employees, as we can deduce from Graph 1.5, these firms rarely employ large numbers of people, rather most of them do not employ more than 20 people. There are three companies that work with more than 100 workers, namely the most profitable of the sector, that clearly are concerned with an industrial production of bread and of other related products.

Graph 1.5 Number of employees in Veneto, 2020



Source: elaboration from AIDA

1.3.3. Pricing

Bread price is variable from city to city and it typically increases as the cost of living in that city grows. By looking at the average price as estimated at September 2021 by the Osservatorio Prezzi e Tariffe by the Italian Economic Development Ministry, we can understand that, in the Region we are studying, Venice is the city where bread costs the most with respect to the other provinces, with an average price of 5,43€ per kilo, followed by Treviso with the price of 4,46 €/kg. The cheapest is Belluno instead, with bread being sold at an average of 3,38 €/kg.

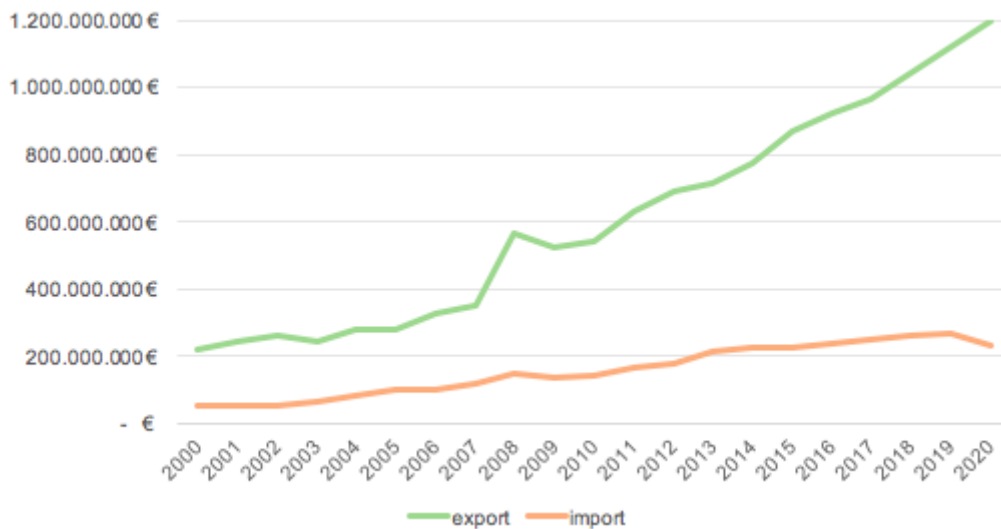
In general, from this Observatory, we can learn that bread is much more expensive in Northern Italy than in the South: taking as an example Rome, Palermo and Bari, the cost of bread in these cities hardly reaches 3€/kg, while the city of Naples sells the cheapest bread, at an average price of 1,88€/kg.

1.3.4. International Trade

As far as international trade is concerned, we can have an insight on imports and exports regarding Veneto by looking at data elaborated by ISMEA. An important premise to make is that the mentioned value is based on the Harmonized System classification, with a specific reference to the category of cereals derivatives that include pastas, flours and starches, puffed and toasted cereals and bakery and pastry products. Therefore, it is a wide category, which contains much more products than bread alone.

In 2020, the export value was greater than 1,2 billion euros (62% directed towards EU countries); on the other hand, imports had a value of more than 235 million euros (98% of which was imported from EU partners) (ISMEA, 2021). It may be significant to note that the value of exports, in the last two decades, has grown by 10x, with a steeper increase occurring starting from 2008-2009. On the contrary, the value of imports still has grown but at a slower pace, remaining largely inferior to exports.

Graph 1.6 Imports and exports of bread in Veneto, 2000-2020



Source: elaboration on ISMEA

As regarding more specific imports of only bread, an article from a local newspaper⁹ reports that, in 2015, the imports were valued 7,9 million euros, being majorly frozen bread imported from Eastern Europe countries, where bread is the cheapest, to be then cooked and sold primarily through the big distribution channels. As this may be harmful for local artisan bakeries, the Region decided then to introduce a trademark “Forno di Qualità” to allow customers to recognize the locally produced products.

Moving finally to exports from the Veneto Region, the larger category of bakery and pastry-shop products, amounted to a total of 254 million euros, having this value increased by 450% in the last 20 years (ISMEA, 2021). 72% of this value was generated by exchanges within the boundaries of the European Union (France and Germany in particular); the other most relevant commercial partners

⁹“L’Arena”, available at <https://www.larena.it/argomenti/economia/un-marchio-per-il-pane-fresco-veneto-1.3167691>

were the United States, Canada and Japan, amounting to 18,7 millions of total exports.

1.4. Implications of Russian-Ukrainian crisis

To conclude this Chapter, we thought it could be useful to give a brief update on the current geopolitical situation as of May 2022, that is affecting the market dynamics in this economic sector, especially as far as raw materials are concerned.

The main players in this context are Russia and Ukraine, whose relationship has been tense since 2014, when Russia took control of the Crimea peninsula, a legitimate part of the Ukrainian territory on the Black Sea. After eight years of hostilities, on the 24th of February 2022, the Russian President Vladimir Putin ordered the invasion of Ukraine, by way of an armed intervention.

The reason why this event is relevant to the purposes of the present research, is that the two countries involved are notably two of the major worldwide producers, and thus suppliers of cereals, especially corn and wheat. Therefore, we are going to briefly introduce which could be the major effects of this war for the cereals and bakery sectors in Italy. In effect, as we have already mentioned in the previous paragraphs, we need to consider that Italy is highly dependent on imports for cereals, with an auto-procurement of around just 35% for soft wheat and 60% for durum wheat¹⁰.

According to ISMEA (2022), the market for soft wheat is highly volatile and unstable, differently from the market for durum wheat that is, on the contrary, less subject to speculative mechanisms. In effect, the price of durum wheat is mostly trained by the performances of Canadian crops and is almost completely unrelated to the Russian and Ukrainian territories. In this case, the important

¹⁰ Data from ISMEA (2022)

increase in its price is due to a strong mismatch between supply and demand, due to an unprecedented drought in Canada that has caused a significant reduction of crops vis-à-vis the same quantity demanded. On the other hand, for what concerns soft wheat, the peaks in its price that were registered in February 2022, are not related to any discrepancy between demand and supply (+1,6% of global demand vs +1,3% of global supply), but we must consider that Russia and Ukraine are two fundamental players in this sector, providing around 14% of global supplies and therefore affecting the commodity's pricing mechanisms.

As far as Italy is concerned, however, there is no real risk of wheat shortages for the bakery sector, as imports from the two countries involved in the war are only marginal with respect to the total: Ukraine is the 7th commercial partner, counting for 5% of imports; the role of Russia is even more marginal, being the weight of imports around just 1% in 2020 (ISMEA, 2022).

II. LITERATURE REVIEW

2.1. Introduction

Previous literature on bread and bakery products is wide, although majorly concerned with other countries rather than Italy, and no specific reference is found relative to Veneto Region. A literature review can be useful to have deeper insights on drivers of consumption and on new trends; some information is also found with respect to the production side of the market, with a focus on the impact of rising prices of wheat and cereals.

2.2. Consumption

When approaching the topic of bread consumption, the first aspect to highlight is the decreasing pattern of consumption that has been going on in Europe in the last decades¹¹. Some reasons to this can be found first in the widespread, yet not completely truthful, belief that bread fattens, and second in the fact that people may prefer to consume other cereal-based products (for example pasta, due to the fact that bread is more expensive and that it is considered to have a too high glycemic impact) and, more generally, in the uncertainty and confusion about its nutritional value (Angelino et al., 2020).

If we move our attention to how people make their choices about bread consumption, we can affirm that the most straightforward types of bread consumers can pick are refined-grain bread against whole grain bread. It is commonly well-known which are the health benefits of the latter, and people are, on average, aware of this (Mialon et al., 2002). Among the most rooted health benefits of whole grain bread, experts say it helps to maintain a more stable level of sugars in the blood, it is protective against cardiovascular diseases and against

¹¹Data from AIBI (2012), available at <https://www.aibi.eu/wp-content/uploads/AIBI-Bread-Market-report-2012.pdf>

bad cholesterol formation, and it may even contribute to the prevention of some types of cancer; also, its richness in fibers is beneficial to the digestive system¹².

Nevertheless, choices about food consumption are generally driven by many other factors than health benefits: freshness, taste, naturalness, price, shelf-life are all some additional aspects which may influence opinions about the type of bread to consume (Sajdakowska et al., 2019). It was also reported that coming from a different country and therefore having a different cultural background may be influential in this sense (Arvola et al., 2007). If we consider a broader category of cereal-based products, not only bread but also pasta and biscuits, studies demonstrate that people are more willing to consume whole grain bread rather than whole grain pasta or whole grain biscuits. However, especially in Italy, people are inclined to think that refined-grain products taste better than their corresponding whole grain version (Arvola et al., 2007). Consequently, especially for commercial and marketing purposes, it is important to reflect on the role that taste plays in guiding food decisions, particularly in those countries where the attachment to food traditions and to the culture of “well eating” are deeply rooted.

Empirical evidence shows that, typically, white bread is more consumed by people who are not particularly interested in health benefits, which coincide with individuals for whom a good taste is a priority when picking food. On the other hand, consumers who are more attentive to healthiness are keener on consuming whole grain bread or other types of bread with some added benefits, such as a reduced quantity of salt or extra fibers. Overall, the latter category is composed majorly by women (Sajdakowska et al., 2019).

Another category of bread that is worth investigating is organic bread, namely a type of bread made of some flour from wheat crops grown according to the

¹² This information was reported by a research conducted by Harvard School of Public Health, available at <https://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/whole-grains>

mandates of organic agriculture. To face the rising demand of organic food and specifically of bread, organic agriculture has been increasing significantly from the 2000s on; Italy comes with the record in EU for its share of organic crops, accounting for 18% (vs 9% in France or 6% in Austria, for instance) but more efforts need to be done for the supply side to meet the demand from consumers (David and Abecassis et al., 2012).

2.2.1. Consumption of organic products

Organic products usually come with a price premium and the willingness to pay for it depends on the type of product. It seems that factors affecting the willingness to pay for organic foods are mostly the perceived quality and safety, the trust in certification, and the brand name (Krystallis and Chryssohidis, 2005). Also, a previous study conducted in the South of Italy has demonstrated that socio-demographic characteristics do not have a significant influence on the decision to buy organic food, except for disposable income, that positively affects this choice. On the other side, people caring about health and environmental benefits and those having a deeper knowledge of the products are more inclined to buy organic (Gracia Royo and de-Magistris, 2007). When coming to the specific product of bakeries, we can see that, overall, organic bread is more attractive than organic cookies or other “vice food”, meaning that a larger amount of people are willing to buy organic bread rather than its conventional counterpart with respect to the number of people who are keen on purchasing the organic version of biscuits. Yet, there seems to be a different price sensitivity for the two groups: an increase by 30% in the price for organic cookies causes only a marginal reduction of consumers who are willing to buy them, while a 30-40% growth in the price of organic bread gives rise to a reduction of possible consumers by a half (Drugova et al., 2020).

2.2.2. Sustainability concerns

Another aspect to take into consideration when discussing food choices is the big issue of sustainability, which may play a role in guiding people's patterns of consumption. Consumers' choices driven by sustainability issues are majorly associated with the environmental aspects of it, while the social side of it is not really given due consideration (De Boni et al., 2019). Globally, the agro-food market represents almost a quarter of total GHG emissions (Oxfam, 2016); in Italy, this sector accounts for 104t CO₂/year (19% of the total) and, overall, the agricultural step of the food supply chain is the most impacting (Chiriaco et al., 2017).

Issues regarding sustainability can be connected to the topic of organic products since it was demonstrated that a reduced use of chemical pesticides in agriculture comes with positive outcomes for the environment (Tuomisto et al, 2012): it causes a reduced contamination of waters and soil, with an impact on biodiversity that is minor than the one produced by conventional agricultural activities. However, we cannot conclude that organic farming is better in absolute terms with certainty, insofar as its contribution to global warming and climate change are debatable. The question arises from the fact that the yield per unit of cultivated area tends to be lower when organic practices are applied with respect to conventional crops. The consequence of this is that any polluting activity and any GHG emission that is generated during the farming process is imputed to a smaller amount of output, therefore the overall impact per unit of product will tend to be higher. (Tuomisto et al, 2012). As reported in a study conducted by Chiriaco et al. (2017) in the context of a small-medium bakery enterprise, GHG emissions generated by the production of 1 kg of organic whole meal bread was equal to 1,55 kg of CO₂, while the same bread from a conventional agricultural crop emitted 1,18 kg of CO₂, considering its whole life cycle from the seed-stage to the retail distribution in shops as packaged loafs of 1 kg. In general, we can affirm

that the simplest and most essential bread types have a lower impact than those containing animal-based ingredients (Notarnicola et al., 2017).

2.3. Pricing

Moving to matters concerning prices, during the peak in the price of wheat in the years from 2005 to 2008, in Scotland, they observed a 30% reduction in the amount of purchased bread. The context, from a macroeconomic perspective, was one in which the prices were generally rising, and the category of bread was particularly hit by this inflationary trend: while prices for the other food items were overall rising by 13%, the retail price of bread was increasing by 33%. Consequently, the category of brown bread was affected by a drop in purchases ranging from 30.81% to 39.26%; on the other hand, the decrease in the purchase of white bread varied from 29.88% to 38.23% (Revoredo et al., 2017). In Italy, when there are increasing prices of raw materials, they are not transmitted homogeneously through the whole supply chain because of the way the market for bread is made: wholesalers selling flours are typically quite large and structured enterprises, while retailers are mostly small artisanal bakeries. Consequently, as retailers cannot afford to lose huge market quotas because of rising consumer prices, they are keen on partially absorbing the increased price, meaning that the rising consumer prices will tend to be lower with respect to the growth occurring at the wholesale level (Mentella et al., 2019).

III. RESULTS

3.1. Empirical analysis: overview and objectives

Bread industry in Italy, and more specifically, in the Veneto Region, has a double identity: on the one side, there are a few large companies, which carry out an industrial production of bread and complementary foodstuff, relying on complex business structures, continuous and largely-automatized production, and on a general low attention towards the quality of the raw materials used; on the other hand, there are several small family-owned artisanal shops, where production is carried out by human labor, driven by a high commitment and passion for the job, with the aim of giving customers, every day, some high-quality fresh bread, pizzas and any other related product to buy.

Overall, this sector comes with some problems and threats that need to be fully understood and analyzed in order to come up with some possible solutions. On the other hand, it is important also to investigate all the positive aspects characterizing the industry, to create awareness on them and to be sure to take advantage of them as opportunities. Considering this as the objective of the chapter, an empirical research was set up, with the purpose of getting an updated image of how these enterprises are doing in current times and in the chosen geographical region. To the best of our present knowledge, the Delphi Method was chosen as the most suitable research method to be applied in this context, with the aim of building a more qualitative, rather than quantitative, analysis, by exploiting perceptions and expertise of stakeholders having some interests and affirmed knowledge of the sector.

Thanks to the application of this method, in effect, it was possible to have direct contacts with people who daily live surrounded by the joys and the struggles concerning the economic activities we are dealing with, and who can clearly identify which are the most urgent issues to be addressed. Feedback from stakeholders was crucial to understand the concrete reality of firms operating in

this field; otherwise, it would have been impossible to develop such an analysis, due to the lack of specific statistical data and of scientific literature on it.

3.2. Research method: Delphi Methodology

In order to pursue the objectives of the present study, qualitative research was conducted by applying the Delphi Methodology. This method of investigation comes in the form of one-to-one interviews to several stakeholders of the sector, with the purpose of understanding the overall perception of its positive and negative sides, their drivers and therefore possible outlooks for their future. The key assumption on which this research methodology is based is that informed opinions by a group of people are more reliable than individual thoughts. This is to say that there will always be some degree of truth in what a group of people believe, while it may not be this effective to completely lean on what just a single person suggests.

In this precise context, the issue to be addressed is about how small and medium bakeries may overcome their most impacting problems and exploit their strengths, being first aware of which are their opportunities. The overall purpose is to provide them with a renewed image and strategic direction, while trying to fight the typical obsolescence and lack of innovation that characterize this sector. Given these premises then, we are going to explain why we have considered this methodology as the most suitable to analyze this phenomenon.

This type of research can be applied in case three requisites are respected (Linstone and Turoff, 1975):

- 1) The issue to be discussed cannot be totally investigated in an analytical and technical way, but rather it may benefit from the formulation of collective subjective beliefs.
- 2) The issue is not enough monitored, and the available information is not sufficient to forecast actual and future developments.

- 3) The issue needs to be faced by taking into account different options and solutions, which may be interrelated and from which some synergies may arise.

The first aspect to consider is the lack of statistical data that might be useful as insights to create a picture of the bakery sector in Veneto and of the phenomena that are developing around it. In effect, data from the national official statistical organization are generally collected at an aggregate level, referring in most cases to the national territory as a whole. In some cases, data are available at the level of macro regions (e.g. North-East), which remain in any case too generic for our purposes. Also, firms operating in this sector are typically really small ones, therefore it is difficult to find some public financial figures to be used for research intentions.

A second reason why Delphi methodology is a suitable approach is that people working in this sector are intended to be the main beneficiaries of the final results. Their expertise and knowledge of how the industry works is fundamental to understanding, in practice, which are the key points that deserve our attention the most. Also, most of the involved stakeholders, namely operators, will potentially be those ones having the power of changing patterns of work and of introducing new managerial solutions.

Finally, this methodology comes with an important perk that is flexibility. As a matter of fact, the panel of experts to be included can be easily adjusted on the basis of the object and our needs: there is not a fixed number of people to be included and the typology of involved stakeholders can vary. As a consequence, one can create a more or less heterogeneous panel, depending on the requirements, and possibly avoid the dominance of one group of stakeholders over the others during the communication process. In addition, people involved in this process are perfectly confident with the subject matter, so there is no fear of being judged by the interviewer nor any incentive for manipulation of answers

or for not telling the truth, meaning that their responses can be considered as reliable.

On the other hand, this method is not perfect and presents some drawbacks which it is important to be aware of.

First, the collector of stakeholders' answers is an essential figure to lead the process. In effect, it is important to guide the process in a neutral and impartial way, without letting the interviewee know which is his/her personal opinion for each question. Also, the answers must not be manipulated in any possible way. This means that the collector has to be a trusted person without any intention of falsification of results.

Secondly, this method can be quite expensive in terms of time needed to collect and elaborate answers, in a way that is directly proportional to the number of stakeholders involved. Also, time spent to elaborate the questionnaire needs to be considered, as it is important to think about all possible questions that can capture all the different aspects that have to be investigated.

3.2.1. SWOT analysis

The questionnaire used for the purposes of the interview is based on a SWOT analysis, namely a tool that is typically applied by organizations in order to carry out strategic planning. Its purpose is to identify and examine the existing resources, both internally and externally, tangible and intangible, and to investigate trends and patterns that may have either positive or negative impacts to businesses.

The first step in a SWOT analysis is to define its four key components: strengths, weaknesses, opportunities and threats. In our precise case, the SWOT scenario was not conceived as to be applied to a single organization, but rather to the sector of artisanal bakeries as a whole.

The first item to investigate is strengths: what are the key advantages of the sector over some possible competitors (e.g., industrial bread producers)? What do small artisanal shops do better? In other words, strengths identify some internal features that represent milestones for a company, on which it is necessary to keep investing. Opposite to this, there are weaknesses, namely some aspects that should be improved as they are, at the moment, an obstacle to the achievement of key objectives. Both strengths and weaknesses can be directly controlled and modified by firms themselves, as they are rooted in the nature of the firm itself.

Moving to an external perspective, opportunities can be defined as any external event or circumstance that could be helpful for the firm to reach the objectives and to enhance its performance; on the other hand, threats are all those unfavorable external factors that may be harmful for the firm. Of course, opportunities and threats are not under the control of the organization, as they depend on the external environment.

For the purpose of this study, an initial SWOT analysis was built by the mediator in order to have a basis to formulate an adequate questionnaire. At this stage, strengths, weaknesses, opportunities and threats were identified as per the mediator's sensibility and perception about the sector. However, it was only through the stakeholder's vote assignment that each item in the SWOT analysis was finally declared to be either a positive or negative condition.

In effect, as a second step in the research procedure, interviewed stakeholders were asked to assign a mark to each of the questionnaire's items: the range goes from -5 to -1 in case of a weakness/threats, where -5 represents an heavy menace and -1 is a light menace instead; in case of a strength/opportunity the range goes from 1 to 5, where 1 is a not-so-impacting advantage, while 5 is a strong one. In both cases, 0 means a neutral position, the aspect in question is neither an advantage nor a disadvantage.

The choice of this rating scale was inspired by scientific literature on related topics: the same range was applied in “*Le politiche per l'agricoltura biologica in Italia*” (2007), for a Delphi research on a related topic.

3.2.2. Interviews

As we have already said, the methodology used for the present research finds its roots in experts' opinions about different aspects of the sector. These opinions were collected in the form of values to be attached to every analyzed aspect, to be further explored by providing some specific commentary on the issue, which were useful to understand the interviewee's specific point of view. In order to limit the possibility of rising biases and/or answer manipulations, questions were posed from a neutral perspective, in a way such that the interviewer was not letting intending his view on the precise issue. In addition, the interviewees had all the time and space they needed to express their personal beliefs.

Interviews were conducted in the form of video-calls, which was chosen as the most suitable method of communication between the parties: the recent Covid-19 pandemic has normalized the use of this helpful technological tool that everybody is now able to deal with. This has come with two major perks: on the one side, the elimination of contagion risk, which still exists as at the time we are writing; second, it has allowed to save some time and to expand horizons from a geographical point of view. Yet, we are perfectly aware of the fact that human contact is an important missing part in this context, and that better synergies might have developed in that case. Anyways, we are convinced it was the right equilibrium point from a cost-benefit perspective.

Interviews were conducted in the form of one-to-one meetings, one stakeholder and the mediator, with the latter having the task of posing questions and registering feedback with the aim of building an appropriate commentary.

Concerning the choice of the stakeholders who have taken part in the project, we can divide them into two broad categories: owners of bakeries, who are the main characters of the production process on the one hand, and researchers/representatives from categories associations on the other; in particular, the latter were important in so far as they have a different sensitivity and a wider vision of the sector.

People belonging to the former group were picked with the help of social media, in particular Facebook was the most important source of contacts, followed by emails and Instagram, which helped only partially. The selection process lasted roughly one month, during which more than 100 different bakery shops were contacted. About 10% of them provided us with an answer and were available to participate in the interview, with their final amount being equal to 12. We have tried to take into account bakeries having different dimensions for as much as possible, and operating in different areas of the region, as presented in Table 3.1.

Table 3.1 Geographical origin of baker involved in the analysis

GEOGRAPHICAL DISTRIBUTION	
<i>VICENZA</i>	<i>4</i>
<i>PADOVA</i>	<i>4</i>
<i>VERONA</i>	<i>2</i>
<i>TREVISO</i>	<i>1</i>
<i>VENEZIA</i>	<i>1</i>
<i>TOTAL</i>	<i>12</i>

As for the second group, it was harder to come up with an acceptable number of experts, as the sector does not really have a meaningful category representation. The final headcount for this subgroup is eventually equal to 3 people, of which two researchers and a regional representative of the Italian Bakeries Federation. All things considered, the final number of 15 people participating in this is to be considered as a satisfactory amount for the type of analysis to be carried out, in which quality is significantly more important than quantity.

Table 3.2 Classification of stakeholders

TYPES OF STAKEHOLDERS	
<i>Baker</i>	<i>12</i>
<i>Researcher</i>	<i>2</i>
<i>Representative of a category association</i>	<i>1</i>
TOTAL	15

3.2.3. Data elaboration

Once all the interviews were concluded, data was elaborated from an analytical perspective in a way that can be summarized as below.

First, the arithmetic mean was calculated for every item of discussion of the questionnaire. From this figure, it has become clear whether each specific aspect is generally perceived as a strength/opportunity or as a weakness/threat: in the former case, the mean is a number greater than 0, while the latter is represented by a negative number.

In addition, a Contrast Index was elaborated. In particular, this index can take on any value ranging from 0 to 1, where 0 means unanimity while 1 represents the maximum divergence on the question. It was arithmetically computed as in 3.1:

$$IC_i = \frac{[Max_j(P_{ij}) - Min_j(P_{ij})]}{(P_{max} - P_{min})} \quad (3.1)$$

where:

$i = 1, \dots, n$, with n being the number of questions;

$j = 1, \dots, k$, with k being the number of stakeholders.

More specifically, if CI is smaller or equal to 0,5, it means that the mean of the variable can be considered as reliable, thus it can be represented graphically and numerically; On the contrary, if CI results to be greater than 0,5, then some attention needs to be paid to numerical data as they are based on really divergent opinions, therefore, there must be some place for discussion in order to explain the different ways of thinking of people involved and the reasons behind that deviation. In any case, it must be said that this index is not influenced by the number of experts participating in the research, rather it signals the presence of divergence even if just one of the interviewees has given a valuation that is distant from the average.

3.3. Results

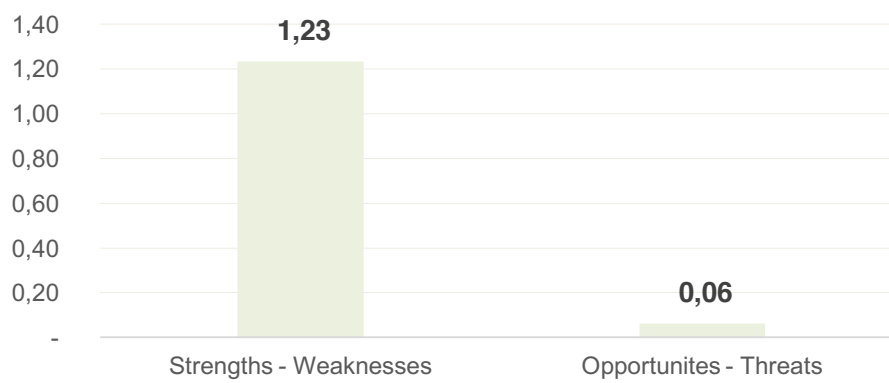
The following paragraph is conceived as a presentation and discussion of the results arising from the empirical study that was previously discussed. In particular, an overall picture of results concerning strengths and weaknesses will be introduced first, while moving then to aspects concerning threats and opportunities. We are discussing items having an acceptable Contrast Index by way of an appropriate graphical representation and explanation; for items with a

higher Contrast Index, some analysis and illustration is required, so we are showing all the different perspective arisen for that point.

3.3.1. Overall performance

Starting from overall performances, the sector is generally perceived to be positively performing, as shown in Graph 3.1:

Graph 3.1 Overall performances



Source: Elaboration on data collected from interviews

Data represented in Graph 3.1 are two Performance Indexes, one for strengths and weaknesses items, while the other concerns opportunities and threats. It was computed according to formula 3.2:

$$PI = \sum_x^n \frac{\mu_x}{n} \cdot 5 \quad (3.2)$$

where:

- n is equal to the number of items considered;

- x are grades assigned by each expert to an item singularly considered¹³;
- 5 is the maximum grade that can be possibly assigned to each item by every expert.

The Performance Index can take a value ranging from -1 to 1, where the former indicates a poor perception of performances (with weaknesses/threats overwhelming strengths/opportunities), and the latter means excellent performances and the maximum exploitation of any business chance.

The Performance Index for the group of strengths and weaknesses is equal to 1,23 meaning that the sector has a fair share of good aspects, more than negative ones. However, strengths are not so strong and there is margin for improvement. Analogously, weaknesses are just a few and they are not so impactful, consequently they are fully compensated by the former category. In particular, the worst weaknesses are limited to those aspects concerning cost sustainability and the managerial skills of bakeries shops' owners.

Moving then to opportunities and threats, which are by their nature dependent on the external environment, the situation is still positive, but the outlook is less flourishing. In effect, the Performance Index attached to this category is equal to 0,06. This means that opportunities still balance out threats, but the latter have a heavier impact, which is combined with several but feeble opportunity items, making the Indicator slightly positive. The most incumbent threats are related to bureaucracy and taxation, followed by issues concerning the labor market and by trends of bread consumption among the contemporary population.

¹³ It follows that PI is an index built on the subjective perception of the sector and on the different degrees of expertise by stakeholders who took part in the analysis, since it is not based on any objective numerical indicator.

In the following paragraphs a more detailed description is going to be provided for each category analyzed with the present research, describing more in detail all the items that make up each category.

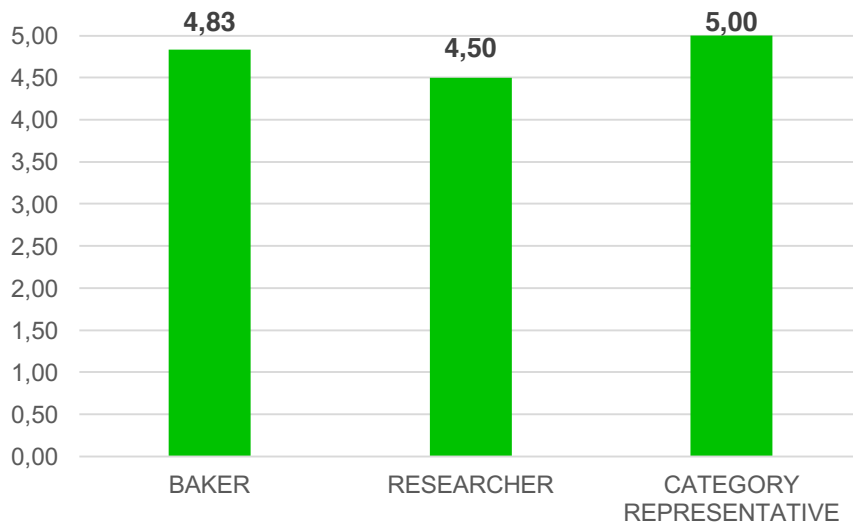
3.3.2. Supply side

The most relevant strength for this type of business turns out to be the supply side, which comes with a total average mark equal to 3,47, the highest grade among the categories explored by the present analysis, meaning that the product plays a key role in the sector. The entries that make up this category are: quality of bread variety of products offered, nutritional quality of the products offered and the access to products by customers. Each of these points will be singularly explained in the following paragraphs.

3.3.2.1. Quality

First, the quality of artisanal bread was appointed by every single stakeholder as an essential feature of the products sold in this industry, since there is no way for this business to generate revenues and to be sustainable in the long run if the product's quality is not excellent. This result can be clearly observed in Graph 3.2, from which we can deduce that all experts agreed on suggesting that there is no other point of strength as quality for what is the reality of this sector: this is also confirmed by the Contrast Index, that is low for this specific investigated item (0,1).

Graph 3.2 Quality of products by category of stakeholder



Source: Elaboration on data collected from interviews

As a matter of fact, as far as artisanal bakeries are concerned, the quality of what they offer is the most relevant value proposition of their business model: while industrial production of bread can rely on high quantities in order to be able to pursue a cost leadership strategy, small and medium enterprises carry out a small-scale production with the purpose of manufacturing a good that is able to preserve all the artisan qualities and that, consequently, can be sold with a premium price, depending on its degree of complexity.

It is also a question of expectations: while customers tend to be fine if they buy an industrial product that they do not perceive as a high-quality one, they feel disappointed if the same happens for an artisanal product instead, which embeds the desire of eating something that, in addition to good tasting, is also made with a unique care. In fact, customers nowadays are highly demanding and well informed about what they eat, so they are attentive about what they buy.

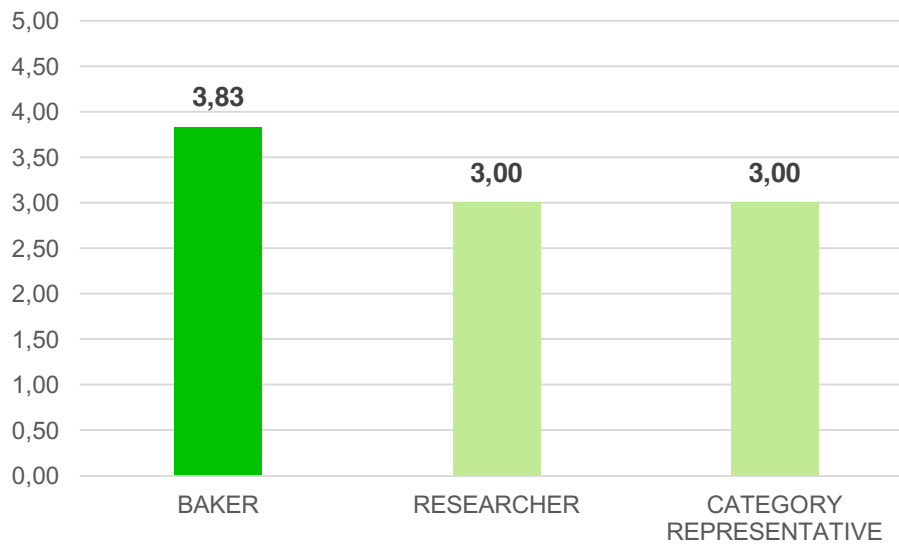
However, it is difficult to provide an unambiguous definition of what “quality” really means, rather it is a subjective characteristic that can be differently perceived by different people. In particular, there are several factors that may influence this

property, from the choice of raw materials to the leavening and making phases up to the final cooking procedure. The aspects that were deemed to be the most considerable by the stakeholders involved were related surely to raw materials, with 40% of the bakers interviewed saying that they choose their flours with care, ensuring that they come from Italian or local wheat crops and that they are organic for the most. Another point is related to the respect of timing: the production process for bread is generally quite long, requiring several hours for leavening and rest. This has a great impact on the final quality of the product and therefore cannot be transcended, differently from industrial bread that is often slave to market necessities of speed and immediacy. Finally, a minority of bakers also declares to accurately choose packaging, which becomes a more relevant aspect for products other than simple bread that can be found in bakeries (e.g., cakes and other sweets, breadsticks etc.): packaging has to be as attractive as possible, trying to enhance the product for the most, while being the least expensive and the least impacting on the environment.

3.3.2.2. Variety of products

The second aspect to consider within this category is the variety of products offered, which is perceived as a quite strong advantage for these businesses, with an average grade equal to 3,27 and a low Contrast Index (0,3), as represented in Graph 3.3.

Graph 3.3 Variety of products by category of stakeholder



Source: Elaboration on data collected from interviews

Variety is conceived, in this framework, as the range of different products that are available in bakery shops. This feature can be seen both from the point of view of bread-related products, and from the perspective of bakery shops as a whole: the typologies of bread that can be found are variable, generally ranging from 10 to even 70 different types of bread (usually more references are produced at weekends). On the other hand, it is notable that bakeries in most cases offer many additional goods other than bread, ranging from freshly-baked pizza to milk, flour, biscuits and other food essentials, behaving *de facto* as if they were small supermarkets in town. Major trends nowadays envisage the combination of traditional breads with some types of deli food for take away. The rationale behind this choice can be seen from two different perspectives: on the one hand, from a commercial point of view, this is useful to satisfy the large variety of needs and preferences of customers, which are personal and therefore variable. The second aspect to consider is more a financial one, related to the issue that bread alone can be only a marginal source of revenues for a shop, meaning that it is what you manage to build around it that counts, in the end, for business purposes. In this

sense, some efforts have to be made to offer the optimal product mix so as to increase the average value of sales receipts by encouraging customers to buy other products when they get in to buy bread.

Things have deeply changed with respect to the past, when the types of bread one could purchase were limited to two, maximum three: as at today, for the same quantity of bread produced, there are at least 10x different types of products, which mean additional labor required and the increasing risk of making various things, but with a worse quality. This latter point is an issue especially for micro-bakeries, where production is personally carried out by a single person.

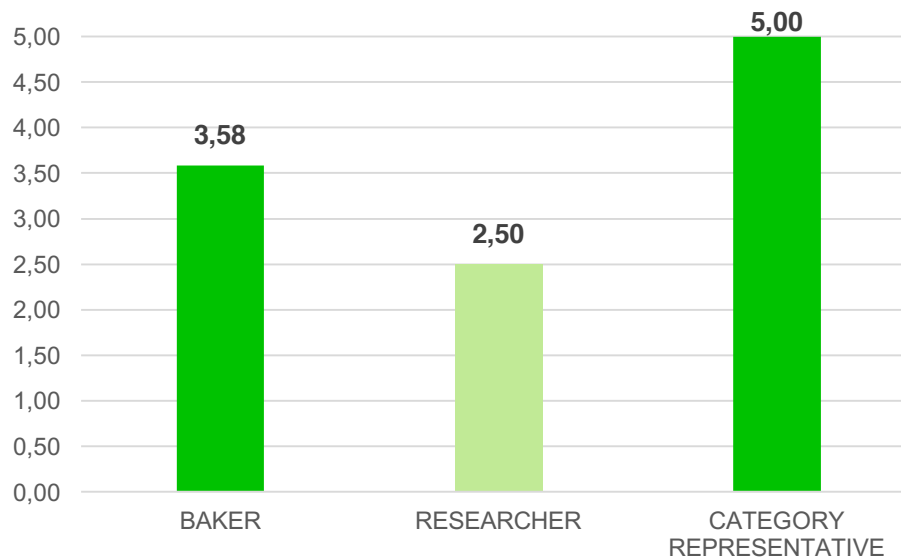
One solution to this problem may be outsourcing and subcontracting services: by creating a network of trusted artisanal producers, bakers could decide to buy from them one or more specific categories of products for reselling purposes. It is likely that this may cause a margin erosion, but also a decrease of required labor, which constitutes the most impacting cost component for this industry and which may allow important time savings, depending on the complexity of the outsourced products. In addition to this, some research about the average needs of customers should be done, in order to get a clear picture of which are the best-sellers and the fundamental products that the shop can never fall short of, also depending on the nature of the shop itself (e.g., if your bakery opens early in the morning, it is important that you are well equipped with all the necessary for breakfast; if it is located next to offices or other workplaces, it is essential to offer as many options as possible for a fast-lunch and so on), while being always ready to experiment and to offer what is most attractive for the customer base. As a matter of fact, the more you get to arouse curiosity among your customers, the more likely sales the higher the amount of sales, on average.

3.3.2.3. Nutritional quality

Another aspect to discuss in this section is the nutritional quality of the products. We intend this point from an absolute point of view, but also in comparison to

what is offered by industrial production instead. From the analysis, it resulted as a strong positive aspect, with an average valuation equal to 3,69 and a general consensus on this from all the interviewees (CI equal to 0,5), as presented in Graph 3.4.

Graph 3.4 Nutritional quality of product by category of stakeholder



Source: Elaboration on data collected from interviews

Indeed, bread is a simple food, made up of elementary ingredients and having a small percentage of fat (around 2%). For these reasons, it cannot be considered as non-healthy, yet it is often demonized for its high percentage of carbohydrates, with the accusation of being responsible for weight gains on human beings. Generally, the nutritional qualities of artisanal bread are well perceived by the stakeholders involved, but the main food for thought comes from its comparison with industrial bread, which may actually be worse for two main reasons:

- (1) If we consider the industrial long-life breads (e.g., *Panbauletto* produced by Barilla), the two products are hardly comparable due to their different taste and ingredients: the latter usually contain a percentage of sugar, which is responsible for the typical sweetish taste that people enjoy,

together with some food additives and preservation treatments that give it a less natural connotation.

- (2) If we consider bread that is sold in bakeries corners within supermarkets, the result appears very similar to the artisanal one; however, it is difficult to trace back the origin of that bread (often imported while frozen, in any case it is hard to get to know the origin of raw materials). In almost 100% of cases, that bread was frozen at some point during its life-cycle before being cooked, meaning that its leavening process was interrupted, with the final result of a bread that is less easy to digest.

Producers are ready to defend the quality of their products, in effect 100% of them are against the use of improving substances and additives and they are willing to offer a bread that is together healthy and as tasty as possible. They say it is quite easy to testify the quality of their own products, while it may be challenging to have more specific information about the nutritional quality of other products sold in supermarkets, as it is hard to know for sure what are the processes lying behind it and which is the nature of the raw materials used; in effect, not all these parameters are disclosed in the label because the Law does not require it.

In any case, a new cultural wave is necessary around bread, which shall be promoted by bakers themselves at the forefront, involving doctors and nutritionists as scientific trusted spokesmen. The aim of this should be convincing people that it is not a demon food so as to create a new concept around this product, which is, at the present, often misunderstood in its nature.

3.3.2.4. Availability of products

The last point to be discussed in this first section is the availability of products, intended as the additional effort that is required to an average customer to specifically go to a bakery to buy fresh bread or any other similar good, while being aware of the fact that a similar product could be bought directly from the

supermarket. The opinions emerging from this analysis are different and they can be summarized according to three main paths:

- (1) The customer is not required to make an extra effort because, either the bakery is well located so it is easy to stop-by if he/she wants to buy the products (this is usually the case in larger city centers), or the customer is sincerely interested in buying those specific goods, so it is a pleasure to devote some time to the purchasing process. This latter view is particularly true for selected high-quality foods.
- (2) The customer is interested in the product, but it may be difficult for him/her to go to a specific shop to buy it, due to its daily busy lifestyle, in so far the available time may be concentrated only in the evening, with two main effects: first, making sure that the bakery is still open when they finish working and, from this perspective, the situation seems right with most of the bakeries open until 7.30 pm; second, customers may find just the leftovers from the day. If this represents an issue, going to a small bakery may represent a disincentive, while going to a supermarket could be a better solution instead, as in this case bread is cooked at continuous pace so it is available also at the end of the day.
- (3) The customer is not interested in the product, therefore he/she is not willing to appositely go to a separate bakery to buy it; on the contrary he/she prefers to buy the same products at the supermarket, during the routine grocery shopping. A minority of the bakers involved in the interview declared they are willing to continue or to implement a delivery program, but, in most cases, this may not be a win strategy for them: the quantities they sell still remain contained and, by doing, so there is no possibility to attract the customer to buy the not-planned extras. In addition, some of them reported that customers tend to be unwilling about paying the delivery service (usually a small amount of money) which has to be

necessarily recharged to the customer otherwise it would be an unsustainable cost for the bakery.

To sum up, the variables having the most weight on this aspect are the interest of the customer, the positioning of the product and finally the physical location of the shop. Availability of the product does not represent an issue as long as the customer is highly interested in the artisanal nature and additional quality of the product, the product is well differentiated from what is commonly found at supermarkets and the physical location of the shop is in line with the habits of actual and potential customers.

Generally, what emerges from the empirical analysis is that availability is a strength for the sector, with a mark of 1,87. The rationale behind it is to be found in the fact that artisanal bakeries are widespread in the territory, so it is quite easy to find one nearby and this should be an advantage for customers. However, as we have explained before, opinions and views are divergent on this point.

3.3.3. Production

Moving on to the macro-category of production, we are analyzing two major concerning aspects, that is to say the efficiency of production processes and the impact of know-how and of working techniques in the final result. The perception we have recorded for this category is that of a strength but with some possibilities for improvement, having it an attached result of 1,42.

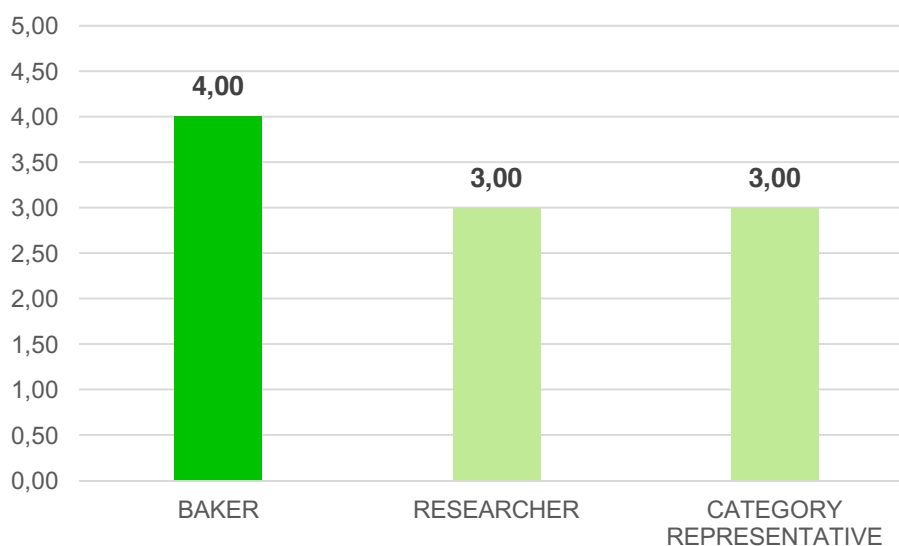
3.3.3.1. Know-how

First of all, a definition of know-how suggests that it can be seen as a non-patented practical information, resulting from experience which is secret, substantial and identified; “secret” means that the know-how is not generally known or easily accessible; “substantial” means that the know-how includes knowledge indispensable to the buyer for the use, sale or resale of the goods and “identified” means that the know-how must be described in a sufficiently

comprehensive manner so as to make it possible to verify that it fulfills the criteria of secrecy and substantiality (Moro Visconti, 2019).

Know-how is the heart of production because it is what truly allows each baker to have differentiated products: in fact, in this sector, we are dealing with non-standardized products. This is indeed demonstrated by the fact that the impact of know-how is considered by stakeholders as point of strength (3,30) and most of the interviewees are harmonized on this view (the Contrast Index is equal to 0,4), as we can see in Graph 3.5.

Graph 3.5 Impact of know-how by category of stakeholder



Source: Elaboration on data collected from interviews

In effect, most of bakers agree on the fact that, starting for hypothetically identical raw materials, the final results would be different depending on the person in charge of production, meaning that some details in the production process may actually be the cause of very dissimilar results (e.g., when and how ingredients are added). More specifically, the most relevant differences can be seen in the structure of bread and on its digestibility. Despite being details, they are what

really counts in the end because customers are aware of these differences and every producer must aim to differentiate itself as much positively as possible.

Nevertheless, differently from other industries, the proper know-how of this sector is not a universal rule that can potentially be applied by whoever gets to know it, but it is founded on sensations developed thanks to years of practical experience. Because of its subjective nature, it is a knowledge that is not easy to imitate therefore, also difficult to teach.

In addition to this, it may be interesting to notice that complex and deeply studied techniques are not always the best solutions to match the market: bakers involved in the analysis declared that simple common bread remains the most sold typology, so applying long and complex techniques in order to obtain a technically superior bread may not be the most efficient way to supply the market. Another relevant need that is important to satisfy is the creation of products with a long shelf life, which can notably be increased by correctly using sourdough and by paying attention to the choice of the flours.

All things considered, the effort has to be proportioned to the market needs in order to make the production process optimal and efficient.

3.3.3.2. Efficiency of production process

Secondly, we are analyzing issues concerning the productive process and its efficiency, in order to understand whether it is typically efficient and how difficult it is to achieve efficiency in this context of small enterprises. The average perception on this issue is sufficiently positive, being the average valuation equal to 1,20, yet with different points of view at its basis.

Broadly speaking, a process can be defined as efficient when it allows the best possible result at the lowest cost. This implies that it is fundamental to have ideas about which is the desired result and which is the level of costs that shall be incurred in order to attain it.

In the case here presented, the production process in question is clearly an artisan one, labor-intensive¹⁴ and still largely based on manpower. We can distinguish the different phases of the process into:

- (1) Procurement and storage of raw materials;
- (2) Kneading of the ingredients and creation of the dough;
- (3) Rest and leavening phase;
- (4) Baking in the oven;
- (5) Distribution to customers

Efficiency can be determined by one or more steps of the production process and there are several ways in which it can be increased:

- Lowering operating costs;
- Bargaining with suppliers to get the fairest possible prices on raw materials;
- Reducing waste (of time but also of materials);
- Improved coordination and decision making among coworkers.

The key concept highlighted by stakeholders was that simple production procedures are the easiest to make efficient: the five steps should be clearly identified, studied and rationally quantified both in terms of timing and of money,

¹⁴ A labor-intensive process requires a large amount of labor to produce its goods or services. The degree of labor intensity is typically measured in proportion to the amount of capital required to produce the goods or services: the higher the proportion of labor costs required, the more labor-intensive the business.

in order to be aware of which are the main drivers behind each of them. To this regard, we could identify two main lines of thought: on the one hand, a more innovative and modern vision based on a deep knowledge and organization of every step, while on the other hand we could understand there is a part of producers that keeps attached to a more traditional approach, based on habits dictates and rooted to the traditional way of doing it, often involving a less clear picture of the situation in terms of resources needed.

The main obstacles to the achievement of efficiency are actually connected to the dimension of this type of enterprises, which are mostly small. Since they rely on an artisanal mode of production, they can hardly exploit economies of scale, therefore every extra quantity produced comes with an impacting marginal cost.

It is also necessary to consider the equilibrium between quantity and quality: producing a small amount of products may cause a decrease in the quality of the final result, as machinery is calibrated on a specific quantity to be produced and, if this is lowered to avoid unsold products, it may incur underperformance. On the other hand, producing too much with respect to the demanded quantity may cause waste, with its consequent costs. Fortunately, waste is not an issue during the production phase, since these goods allow for some margins of error while being made: for every dough gone wrong, there is usually the possibility of recovering it as a raw material for a new dough. However, it may happen that some tests are required before achieving the desired result and a product that is suitable for sale, which may translate into failing attempts not adequate for consumption. The real issue on this topic is about waste of finished product at the end of each day: at least 50% of the interviewees declared dealing with large quantities of unsold food at the end of the day, which represents a hardly recoverable cost.

In addition to better management and planning of the quantities to be produced, one innovative solution could be the food platform “Too Good To Go”, which allows bakers to sell their surplus at a discounted price rather than throwing it

away. It is for free and it may also represent an opportunity of advertising within the local community. The other, more traditional solutions to this problem are to recycle breads for other food preparations or, as the last resort, to use it as animal feed.

3.3.4. Management and Business

This category, dealing with managerial aspects of these enterprises and with business-related topics, is made up of items that all have a Contrast Index that is greater than 0,5: it is hard to find a common line on this topic and everyone has his own personal view. The aspects here considered are sales techniques, managerial skills, the sale price (both in terms of gross margin and in terms of variability), the cost structure and the industry profitability. Overall, the category is perceived as a point of strength (1,07), being it driven by sales techniques, that is partially offset by the negative repercussions of costs and managerial skills.

3.3.4.1. Sales strategy

Sales techniques are the strongest aspect within this category, reaching an average grade of approximately 2,5. This means that the way bakery products are sold is perceived to be adequate to the nature of this business, being for a dominant majority a small-retail business: the typical customer wants to be personally served and even cuddled by sales assistants, is curious about the products he sees and wants to have all its doubts and questions answered. For this reason, it is important to have a competent and trained staff, with a complete knowledge of the main characteristics of the products sold.

This is also consistent with the goal of building customer loyalty in order to sustain sales and to increase the value of every single sales receipt: once the customer trusts you, he will be more keen on buying some extra products, in addition to the original pieces of bread he/she went inside for. In effect, the major factors

affecting customer loyalty are surely quality and artisanship of the product, but also proximity, tidiness of facilities, and the service received.

In order to potentially boost sales, also the physical location of products in the store can make a difference: it may be useful to highlight the specialties of the day and to place at the right height what you want people to notice the most, applying the most suitable rules of visual merchandising (verticalization rather than disposing elements horizontally and grouping by three products in order not to lose the eye attention).

Secondly, but not less important, there is the necessity of acquiring new customers: the first elements to consider to boost attractiveness are a nice shop windows, letting people who pass by create an idea of what they can find inside, and a cool store sign. Afterwards, the advertising process shall take and it should be explored in all of its dimensions and possibilities. From this perspective, the sector is still largely based on outdated forms of communication, relying on word of mouth, especially in small towns, where, they say, if the product you sell is truly good, then everybody will get to know it. This may be true among over-60s customers, but the prevalent communication tool for the youngest segment of customers is provided by mobile communication, involving an updated presence on social media together with a website to surf in case one is looking for additional information.

This world is currently being explored by those bakeries that are more enlightened, while the more traditional side of the industry has some difficulties in approaching this issue. Whatever the preferred form of communication is, what really matters is that it is appropriate to the segment of customers you are intended to serve, depending on the differentiation of the products the bakery offers (e.g., is the focus on the morning, the afternoon or the evening?) and on the nature of clients (gender, age, food choices, free time etc.), with the purpose of generating curiosity among people and making them enter the shop: once they do this, at least one small sale is guaranteed.

Finally, there are some bakeries also having a B2B channel of distribution, usually a small percentage of the total, but still relevant. Depending on the nature of the production, it may regard the sale of goods for breakfast to cafés, the sale of other bakery products to similar activities or even the supply of bread to small and medium supermarkets. However, people who took part in this research suggested it is not always worth it: in effect, the extra production required to satisfy the wholesale demand tends to be too costly in terms of additional labor required, due to a lack of personnel in charge of production. Also, they say this is a way of selling out the product, which suffers from a perceived devaluation, due to the fact that most customers do not pay attention to the origin of the products they buy through large distribution channels.

3.3.4.2. Managerial skills

Moving to managerial skills, this point results to be a light weakness (-0,4), although opinions are variable to this regard. In particular, we can identify three major streams of thought:

- (1) The baker is fundamentally conceived as an artisan, so being a businessman is not in his nature. He is nowadays forced to be an entrepreneur as well, due to the way the market has evolved and to the entrance of the large distribution in this sector, which has taken bakery products, especially bread, in this new sales channel. This has caused the artisan to rethink his approaches and to adapt to a way of reasoning that is influenced by the industrial processes. However, being an entrepreneur remains substantially different from being an artisan, as the former pursues profit, while the latter cares more about what he is able to offer.
- (2) There is a general lack of managerial skills in the category, that is often not particularly willing to receive training and updates about this issue. However, we could say they are a group of people that have collected several years of experience on the field so they have learnt by doing and,

if they have accomplished to survive so far and to hand down the activity to the next generations, it means they know how to deal with it. In any case, this does not signify that things cannot be improved, for instance by studying more carefully business necessities, the cost structure or pricing.

- (3) It is a context where the product counts, but commercial and managerial capacities are indeed more important. In particular, according to this view, it is a sector that is driven by communication and where having an accounting and financial approach could make the difference in understanding which is the best strategy to pursue. Even so, it is infrequent to find people operating in this sector having these capacities or willing to learn them: a relevant portion of these activities are owned by people that are waiting for their retirement or that go on passively. In addition to this, very often, owners of bakeries are also those in charge of production, meaning that they are particularly absorbed by the labor required so they do not feel like putting some additional effort into conceptual aspects. This is also related to the fact that younger people are not generally interested in this sector nowadays.

The help of some external advisors is necessary (e.g., accountant, labor consultant), but also the intervention of *ad hoc* business consultants may be useful to review commercial strategies and to provide some valid solutions to existing problems.

3.3.4.3. Costs

Another concern is about costs, which emerge as a tenuous weakness in this context, having an average equal to -0,13, although with different supported positions by stakeholders.

When discussing this point, we are going to make a distinction between fixed and variable costs, but also to make some considerations with regard to the current

historical moment that is challenging this industry. Assuming that we are dealing with already established business, we are not considering all the initial costs that are required for the set up.

A fixed cost is a cost item that does not change as the quantity produced varies; a variable cost is dependent on the amount of quantity produced instead.

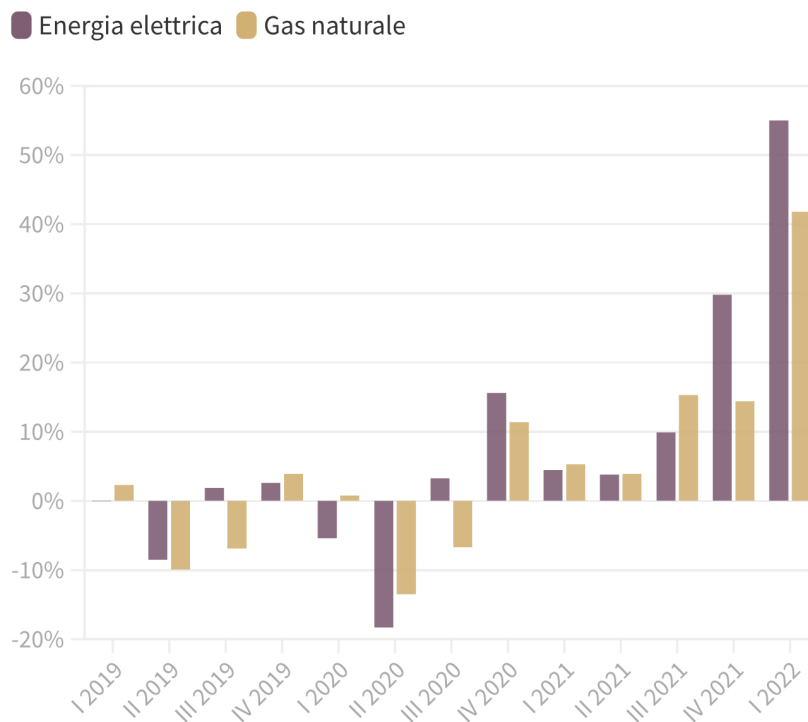
The former category includes rents, payrolls, ordinary maintenance on equipment and depreciation, and taxation. In particular, the first two items were highlighted during the analysis: clearly the cost of rent depends not only on the dimensions of the shop and laboratory, but also on its location, which is a relevant strategic choice. We can say that a third of interviewed bakers declared that rents represent a significant incumbency each month, while those possessing the building in which they work were more optimistic about cost perspectives.

100% of people who took part in the analysis agreed on the unsustainable effect of labor cost, which is not a problem for net wages themselves, but rather for the impact of all additional costs, including social security contributions, severance pay, and for all the mandatory continuing education that is required every now and then. In this view, it appears evident that those activities that can count on the ownership of the premises and on working contribution by some family members have more profitability possibilities.

Moving then to variable costs, they typically include costs for raw materials, utilities (energy, gas, water), extraordinary maintenance, some general expenses (mailing costs, telephone bills etc.). If we set aside costs for raw materials that we are further discussing in the next paragraph, the most impacting cost component in this class of costs is related to utilities, which are considerably being influenced by the global circumstances that occurred between 2020 and 2022, envisaging a remarkable increase of expenses.

In particular, in the first quarter of 2022, before the beginning of the Russia-Ukraine war, the cost of energy had already increased by 94% with respect to the same period of the previous year¹⁵. Actually, as shown in Graph 3.6 and as witnessed by stakeholders, the cost of energy started to peak from the second half of 2021.

Graph 3.6 Quarterly variation of energy prices (2019-2022)



Source: ARERA (2022)

The main causes for this are to be found in the mismatches between supply and demand due to the post-pandemic recovery of the global economy, which translated in a boom of industrial production vis-à-vis an availability of energy supplies that had lowered because of the former slow down of activities during Covid-19 outbreak. Also, the escalation of geopolitical tensions between Russia

¹⁵As reported by Il Post at September 2021

and NATO contributed to the increase of costs, with a remarkable impact in Italy, that depends on Russian gas supplies for a 43% of its total¹⁶. This has clearly had some repercussions for these enterprises, which have observed double or triple amounts for these cost items, considering that most ovens used are powered by gas (only a minority by electrical energy).

The situation has sometimes appeared a little better concerning electrical energy, since three of the involved businesses have reported to have a contract for a fixed fee (which is almost impossible to obtain for gas instead), also thanks to the contribution of buying groups. Buying groups are groups of consumers that decide to buy a good or service all by the same supplier, so the larger the group is, the better the price they manage to obtain. This is possible also thanks to the possibility of directly interacting with producers or suppliers, therefore cutting all those costs related to distribution and promotion. A more positive outlook was described by those having invested in renewable energy and in energy efficiency of their building, saying that they were less subject to the current increase of energy expenses. However, this consideration is less suitable for those who do not possess their business premises.

Costs for maintenance can be ordinary or extraordinary: as concerning the former they should envisage the same amount each year, thus being easy to budget. The latter instead, should be planned for as much as possible, in a way that is efficient if we consider the savings they allow on other fronts. In effect, assuming that it comes with a positive cost-benefit analysis (otherwise it would not be convenient to pursue), extraordinary maintenance can be capitalized so it increases the accounting value of the activity and also comes with benefits linked to a better quality of work. Some examples are related to the modernization of equipment, such as a new oven or a new installation for air flows, which allow respectively savings on utilities (expecting that a new oven is provided with a

¹⁶ Source: Ministero Transizione Ecologica (2022)

better energy efficiency thanks to new technologies) and on dyeing (which can be postponed with a consequent minor frequency of incurrence for this cost).

A majority of stakeholders involved declares to be in a difficult situation because costs are rising at unsustainable rates and in a way that is day by day harder to absorb; However, the opinions of external stakeholders is more optimistic, suggesting that the advantage for this type of business is that costs are transmissible to the final customer, rather than having to be completely absorbed by production. In conclusion, there is a double and distinct perception on this issue.

3.3.4.4. Sales margins

Shifting to the opposite side, sales prices are perceived to be an acceptable point of strength (1,33) with divergence of visions and with a declared improbable situation, due to the fact that, although prices do cover costs, margins could be more satisfactory.

A widespread vision among bakers is that bread is a smokescreen because it is sold at a low price and therefore it is difficult to make a profit on it. Indeed, its function is to attract customers so that some complementary products can be sold in the same context. In effect, bread is traditionally a poor and popular food, meaning that increases in prices are acceptable only up to a certain threshold and that the major applicable markups are on the other products of the mix (estimated 20% vs 35% on other products). This is the reason why bakeries, as of today, cannot even think of surviving by selling only breads, but they also need to offer other solutions, such as a cafeteria and/or a cuisine service, depending on their target. Another vision is about selling bread at a higher price range (e.g., 8/10 €/kg), but this shall be consistent with the positioning of the bakery, with the use of specific raw materials and/or with some particularly sophisticated production techniques that allow the justification of that price.

In any case, the right expedient to have more gains is about producing in bigger sizes, to cut according to the customer's request, since they are cheaper to produce (less labor required and more optimization of spaces) and, by being actually bigger, they allow to sell a greater quantity at a time. Also, we have to consider that the quantity of bread produced is surely less than what it was in the past, so the resources in excess can be invested in the production of other more profitable products.

Aspects related to pricing are for sure dependent on where the shop is located and therefore on its perceived positioning (e.g., it is acceptable that a shop in the city center or in a touristic spot has higher prices than one located in the nowhere within the countryside). A second aspect to consider is related to the nature of the product itself: when we consider bread, it is important to keep in mind its popular soul even though this feature shall not cause a perceived devaluation of the product. A best practice to be applied in this context is to carry out an analysis of the prices decided by the same activities in the surroundings, which shall work as benchmarks.

3.3.4.5. Variability of prices

A similar analysis can be made in relation to the variability in time of prices, which is perceived a tiny bit better than margins (1,53). Approaches are different among stakeholders, as those who are not directly involved in the production process think that prices are easy to change according to the needs of cost absorption.

What emerges from bakers instead, is a prevalent image of sticky prices, that are kept constant through several years and that are rarely modified. Only a small minority of them declares to apply small but frequent changes to prices, in order to be always aligned with changing macro and microeconomic circumstances and to current market levels.

Independently from the prevalent belief on this issue, they all admit they were forced to raise the level of prices in the past months in order to face the recent jump in costs, both related to utilities and to the rise of raw materials expenses.

The reactions from customers can be distinguished among those who show some concern for this, and the others who do not even notice it, since the overall expense for this category of products still remains contained. The baker's direct experience should lead him to take decisions relative to this aspect, with the only requisite that he manages to cover at least the incurred costs, but keeping in mind that changes in the level of prices are commonly subject to media hype.

In general, there is a limit that doesn't have to be surpassed and it is the willingness to pay: it is the maximum amount of money that a customer is willing to pay for a product or service. It may change according to demographics, to the general state of the economy, to the precise single customer, to contemporary trends and also to the quality of the product and it may fluctuate over time. The advantage of pricing activities is that they can be changed at any moment so as to be adapted to market needs so a little testing may be required to detect what is the customers' reaction. In general, the sale price shall be computed by taking into account fixed and variable costs, the desired percentage of margin and, since we are dealing with an artisanal production, it should also entail those attributes related to differentiation and complexity of the process: the more refined a product is, the higher the willingness to pay for it.

3.3.4.6. Profitability

Finally, all the previous considerations on costs and revenues shall be put together to have some insights on profitability, which is overall positively perceived by stakeholders, with an average esteem equal to 1,7.

The approach to this aspect is subjective and may depend on the degree of entrepreneurial satisfaction: overall the situation here analyzed covers both the

group of those being overall satisfied with the level of profitability they are able to generate, while another group is more afraid of the future outlook, also due to the uncertainty of the current situation. Nevertheless, a widespread idea that is almost common to everybody is that revenues are hardly considered to be in line with the amount of hours worked because this activity requires a lot of time investment that, for the entrepreneur, may not be properly remunerated.

In any case, more modern and innovative bakeries with positive margin effects due to greater price premiums would allow an increased profitability, which may also be combined with a major volume effect, meaning higher volumes sold because of a more attractive product.

In numerical terms, if we consider the number of employees as a proxy to identify the dimension of the firm, we can see that the average level of revenues for bakeries with less than 20 employees, as per their last available financial results, is around 410 thousands of euros. However, 93% of these bakeries have less than 8 employees and average revenues of 286 thousand euros. Then we can say that revenues are, on average, greater than €1 million for those firms having more than 14 employees. In general, revenues increase as the size of the firm does¹⁷.

3.3.5. Raw materials

The macro-category including raw materials, is perceived as a feeble strength for the sector (0,7), with a negative impact caused by the current uncertainty around the variability of costs. The most negative approaches come from researchers, who consider this aspect as a weakness, while category representatives and bakers seem more positive on this. The items that make up this category are the

¹⁷ Source: elaborations on AIDA (2022)

incidence of raw materials in the product cost, their availability and the variability of raw material prices.

3.3.5.1. Incidence of cost for raw materials

Starting from the cost incidence, the outlook is generally positive (the average is 1,4), because raw materials impact on the final cost of the product just for a 10 to 20% of the total, meaning that overall the cost of raw materials is not the most relevant cost item among production costs. Even if we consider the significant increase in their wholesale cost starting from the second half of 2021, the variance in the total cost of the product that is due to the growing expenses for raw materials is not so impacting, due to the low incidence. Some evidence for this comes from Coldiretti (2022), suggesting that the sale price of bread is 13x the cost of grains, meaning that it is primarily affected by cost components other than raw materials.

Because of this, it may be worthy to investigate the potentials of using higher quality materials from a short supply chain: the difference between the price premium permitted by this extra feature and the consequent marginal increase of cost should have a positive effect for the business, as long as this added value is properly communicated and correctly understood by consumers. To sum up, the main issue as at the first half of 2022, is not strictly related to the rise in costs of raw materials, but it is more the concomitant rise of all the other cost components, having a global impact on production costs that cannot be ignored. In effect, if we could analyze the effect of cost increment of raw materials on the final sale amount, the difference would be almost insignificant for the customer.

In spite of this, the Contrast Index for this category is high, as smaller bakeries with a very limited number of employees report a higher incidence of raw materials in the costs (up to 60%). This effect may be explained by an overall lower personnel costs (due to the smaller headcount) with a relatively more impacting weight on supplies costs.

3.3.5.2. Availability of raw materials

The availability of raw materials is not conceived as a problem, being its average value equal to 1,6: in fact, they are commonly supplied by ad hoc suppliers, specialized in assisting this type of activity. Usually, there are long trusted relationships between suppliers and the bakeries, so the necessary ingredients are mostly available at any time, being them common and simple materials. Moreover, some stakeholders reported that some milling industries do not allow the same bakery to buy an excessive quantity of flour to avoid the monopoly of the available supplies under a few producers, especially during crises and uncertainty periods.

In the past, suppliers used to have very homogeneous prices for products of a comparable quality, but things have changes in the last few years:

- Because of Covid-19 pandemics, there were some temporary modifications to the productive cycles, which have created a mismatch between demand and supply, not specifically for flours, but mainly for other types of raw materials that are used in the preparation of complementary products, such as oils and butter, but also in all the packaging components, that have become hard to find, especially before the holidays period.
- The ongoing climate and environmental crisis has some repercussions on cereal harvests, including wheat, that are more and more unpredictable and expensive. In effect, droughts and floods are phenomena that are becoming more frequent and which have a direct impact on the quality and quantity of the crop, according to which the market price is set.
- Geopolitical issues, which are particularly impacting for Italy, being a country relying for the most on imports of soft wheat. Those bakers buying local flours have for sure less procurement problems, but they are just a

small minority. This does not mean that the problem of lacking supplies can be completely solved by using only Italian grains, as there would be a shortage of them if every single baker adopted this strategy. The main problem is related to Italy's type of terrain and to its climate, which are not suitable for the cultivation of a grain that is strong enough to support the performance required.

3.3.5.3. Fluctuations of costs for raw materials

Finally, we need to consider issues about fluctuations in the cost of raw materials, which are actually negatively perceived, with an average equal to -0,8, although we have to take into account that this may partially be biased by recent market developments.

Before 2021, the majority of stakeholders said prices were typically flat and constant, with some possible peaks that could occur at some specific point during the year. However, since September 2021, they have witnessed increases in prices of flour ranging from 50 to 100%, with significant peaks also in milk, oil and butter among the most relevant. In any case, the major issue highlighted to this regard was about the speculation mechanisms that affect prices in this sector: as declared by Coldiretti (2022), trends in prices of wheat are less and less dependent on supply and demand, rather they are often affected by financial transactions dealing with futures derivative instruments¹⁸, that allows them to virtually buy and sell the commodity. The prevalent opinion of stakeholders is a really pragmatic one: these financial mechanisms are often uncontrollable and they may translate into practical consequences for the small activities that deal with the product, which is daily consumed by the entire population. Also, there is sometimes a mismatch between the change in prices of these materials (more

¹⁸ A future derivative instrument is a contract between two parties that agree on exchanging a good in the future at a price that is decided in the present.

volatile) and the variability of the sale price of finished products (stickier). The only thing to be done is to be aware of these mechanisms and try and get the most convenient supplies.

3.3.6. Demand

This broad category is the best performant one within the context of opportunities and threats, with an average performance index equal to 1,6. It includes several aspects concerning the demand for local and quality products, trends and patterns of bakery products consumption and the willingness to pay for food products of a higher quality.

3.3.6.1. Changing trends in quality consumption

Starting from how consumer choices occur, we can surely claim that the buying process has evolved from the past, in so far as customers today are really more informed ones, with the consequence that they own a significant market power with respect to firms. This is also due to the quick access to any desirable type of information, which is helpful to reveal whether a product is suitable for the customer's needs or not. However, choices in this specific field of consumption are not totally the result of a rational analysis, but they are heavily influenced by emotional aspects such as sensations (think for example to the impact of a good smell or to the view of appetizing foodstuff) and also by the cultural meaning bread and related stuff have in the Italian traditional heritage. So, while in the past people did not use to choose to consume bread, rather it was a need, because of its cheap nature, its wide availability and its high satiating power, on the contrary, nowadays we can afford to choose whether we want to eat it or not.

If we take into account the aspects that can be rationally analyzed, we could say that the variables that mostly affect the consumption patterns are issues about health and well being (e.g., products with a reduced salt quantity, vegan diet, less refined flours, organic raw materials etc.), social responsibility concerns (e.g.,

short supply chains and local raw materials, packaging with a reduced environmental impact) and lifestyle choices (e.g., personal finances and free time). What emerges from the empirical analysis is that these factors represent the opportunity for bakers to reinvent their activities with the purpose of keeping updated to the market expectations and to study the creation of new products thus increasing their know-how basis.

In effect, these requirements can be satisfied thanks to the know-how that artisans have developed and which represent a competitive advantage with respect to the industrial side of this sector, since (1) working techniques are more sophisticated and lead to better results in terms of quality, especially in the case of special flours that need a rigorous care during production to obtain a good result and (2) differently from industries, the artisan can afford to try and put in the market new types of product from one day to the next, while the process for the release of a new industrial product is longer and more complex and usually involves some months of studying before it is made available in the market. In addition, if we take into account timing needs, it could be profitable to introduce a variety of ready meals on which markups are generally higher and which match the needs of those having more money availability but less free time.

If we move then to more irrational aspects, we could say that increased opportunities arise in terms of marketing and sales strategies, which can be pursued by developing a product that boosts the curiosity of consumers and their irrational feelings (e.g., new products are typically easier to sell because the customer is incentivized to try them, foodstuff that is pleasant to see and that smells good etc.). At the same time, a third of the interviewed bakers declare that the most sold product still remains simple white bread. This means that producers should study what is the demand of their customer segment in order to optimize their production mix with respect to the demand.

3.3.6.2. Trends in quantity consumed

Another aspect to be considered within this category is the decreasing trend in quantities consumed, in particular of bread: all the interviewees agree on the fact that this issue represents a threat, in fact the average resulting from the analysis is equal to -2,44, as we can clearly see in Graph 3.7.

Graph 3.7 Consumption of bread by category of stakeholder



Source: Elaboration on data collected from interviews

This phenomenon is further confirmed by operators that are continuing today a family activity that has been carried out for years before: they are directly witnessing a significant reduction in the quantities of bread that is bought today and therefore they are aware of the reduction in production as well.

We can identify two main reasons why this has happened: (1) social and demographic issues and (2) nutritional aspects. Starting from the former, in the past families were larger, prosperity was not as widespread as today and people used to be employed in more physically tiring jobs, with the consequence that people were hungrier but had less purchasing power. In this sense, bread was within everyone's reach and represented a good compromise thanks to its

moderate cost. On the contrary, today, jobs are much more sedentary and families are smaller: each household buys on average two loaves of bread each time it enters the bakery, while in the past families used to buy up to 1 kg almost every day, with the result that production has decreased from 250 kg to 70/80 kg per day¹⁹. The second reason to consider concerns the nutritional aspects, as today carbohydrates, particularly white bread and pasta, are constantly demonized and they are often the first foods to be excluded from diets, since they are blamed for weight gains.

The consequent reduction in quantities produced is sometimes a problem not only in terms of missed earnings, but also because equipment is made to handle a fixed quantity of dough, with some consequences on performances in case there is too little of it: it is necessary to find the right equilibrium between quantities (considering the importance of limiting waste) and quality, which may be compromised by a too restrained quantity. If it was necessary to produce more than what can be sold, it would be important to find new additional distribution channels.

3.3.6.3. Affordability of the product

Other emerging consolidated opportunity concerns the affordability of bread and similar foodstuff: stakeholders appear aligned saying that, despite the recent increases in prices, bread remains affordable for all households, also in light of the fact that price variations are applied to 1 kg quantity, while the average quantity bought ranges from 200 to 400 grams, meaning that variations are just slight in the total expense.

¹⁹ Data reported from interviews, applied to small bakeries (less than 5 employees) located in a small town.

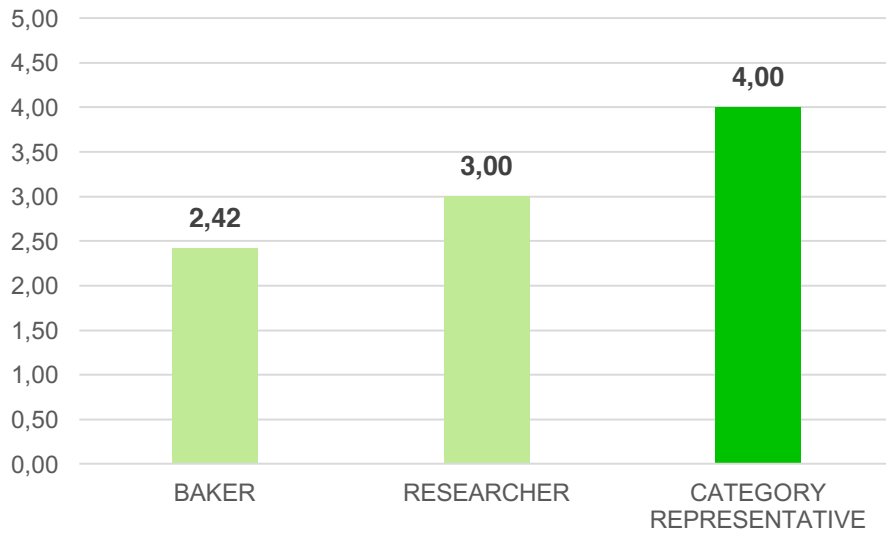
It is difficult, though, to generalize this aspect, as there are several typologies of customers, each with different needs:

- (1) Methodical customers, who are used to buying the exact same products everyday and thus to spend the same amount; they immediately notice any price change and this annoys them.
- (2) Gourmet customers, which are particularly attracted by sophisticated products also in light of the fact that they deeply care about what they eat; they are willing to spend more on foodstuff, so they typically do not pay too much attention to the exact price of what they are buying.
- (3) Standard customers, which do not follow any precise purchasing pattern, but rather they buy what they feel like at random moments, without spending an excessive amount of money.

In this sector however, due to its artisanal nature, people tend to be more interested in the quality-price ratio rather than in the price alone, which can be generally translated into higher willingness to pay for artisan products showing a higher-quality image.

Here, the concept of niches can be introduced: as we are witnessing for other patisserie products such as *Panettone*, people were used to buy it from supermarkets at a really low price until some years ago; more recently, instead, a majority of people has begun to demonstrate a particular interest for the artisanal version of it, and is willing to spend up to 10x the price of an industrial product (prices start from around 15€/unit). This trend of consumption could be exploited also for bread, as long as trends of the sector are correctly intercepted and the clientele is keen on it: each bakery should understand whether a premium product would be accepted or not. To sum up, this point is perceived as an opportunity (3,14) in light of what was described before, as can be deduced from Graph 3.8.

Graph 3.8 Affordability of bread by category of stakeholder

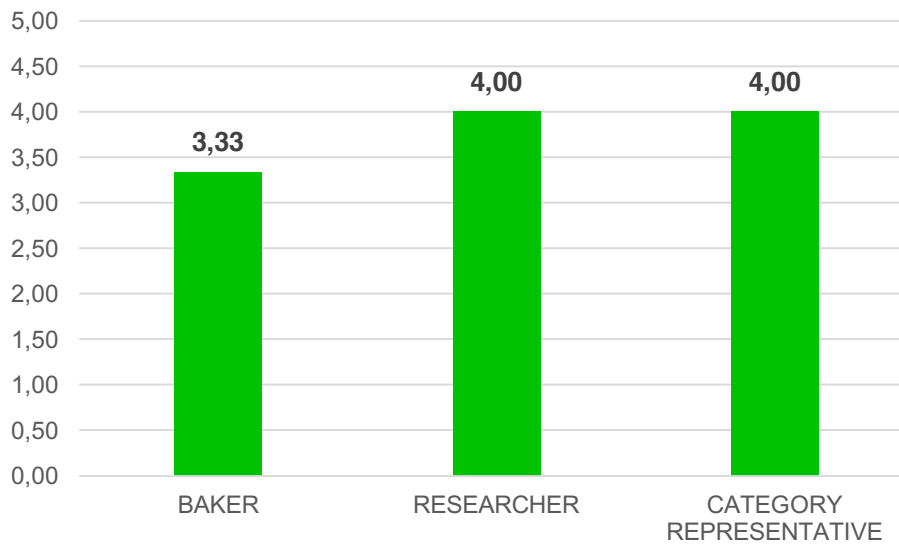


Source: Elaboration on data collected from interviews

3.3.6.4. Demand for quality products

Demand for quality products is another great opportunity to consider, more specifically it is the most valuable aspect from stakeholders' point of view within the demand category (3,47) on which they mostly agree, as shown in Graph 3.9.

Graph 3.9 Demand for quality products by category of stakeholder



Source: Elaboration on data collected from interviews

Since we are dealing with foodstuff, we intend quality as the combination of: the absence of dangerous substances, better organoleptic qualities, the presence of nutrients, the suitability to some particular dietary needs, age or lifestyles, the conformity to some parameters such as the origin and the composition of food, but also as the durability and easiness of consumption (Zoani et al., 2020) Nowadays, some additional aspects could be included in this definition, such as issues concerning sustainability and the environment, which may contribute to the shaping of the concept of “quality”.

As reported by Barjolle and Sylvander (2000), consumers are more and more suspicious about the quality of industrial products, thus they are more willing to eat local food or any other food for which they are able to trace the origin back. This is because not only it is perceived as safer, but it is also connected to a social identity and to a cultural representation and artisan realities should be able to highlight and to let the consumer know these specific traits of their supply in order to be able to monetize this surplus. The basis for making it possible is the creation of a consumer culture, through actions of awareness, knowledge and

linking (namely knowing the product's existence, knowing its features and then appreciating its benefits that should be aimed at guiding consumers to perceive all the immaterial aspects of the product). If we apply this reasoning to the nutritional aspect, the first thing to do would be about creating awareness on the existence of products that can be better or worse for our health, followed by a proper explanation of which are the features that make it so (e.g., the quality of flours, the type of grain or other cereal, the leavening process etc.) to finally describe which are the benefits of the former features on human health.

Due to the value proposition of this business, if quality was not an opportunity to pursue, small bakeries would not have any existence purpose, but rather the constant and continuous research for excellent products must be at the basis of what they do and it usually is the basic need, together with a good taste, that people buying from a bakery need to satisfy.

3.3.6.5. Budget for quality products

Household budgets for quality foodstuff is perceived as an additional opportunity by stakeholders, because people, especially according to the Italian habits and culture, are really sensitive about food security and an increased food security is usually associated with a higher quality product. In effect, this is the prevalent thesis among interviewees, who attached an average valuation equal to 2,13 to this aspect, considering it as an opportunity against competition from industries and for profitability as well. However, there is some discrepancy on this issue, and it is mainly due to the fact that some others think this is a purely personal matter, that is strictly dependent on each household's earnings and interests.

In any case, according to the supply and demand law, what people look for is the best quality at the lowest price, so there is an equilibrium point somewhere: if it is overpassed, it may cause households to be unwilling to buy the product, as it is considered to be too expensive; on the contrary, if the price remains lower than

the optimal point, everybody wants to buy such a cheap good, causing theoretical shortages of it in the market.

Bread still remains a very popular product that is at the basis of daily nutrition so it must be priced in a way that keeps it accessible to everyone. Also, its consumption is helped by a favorable taxation regime, with a VAT tax rate at 4%. In any case the general perception is that people have the desire to eat well and therefore they are willing to spend a little more to satisfy it.

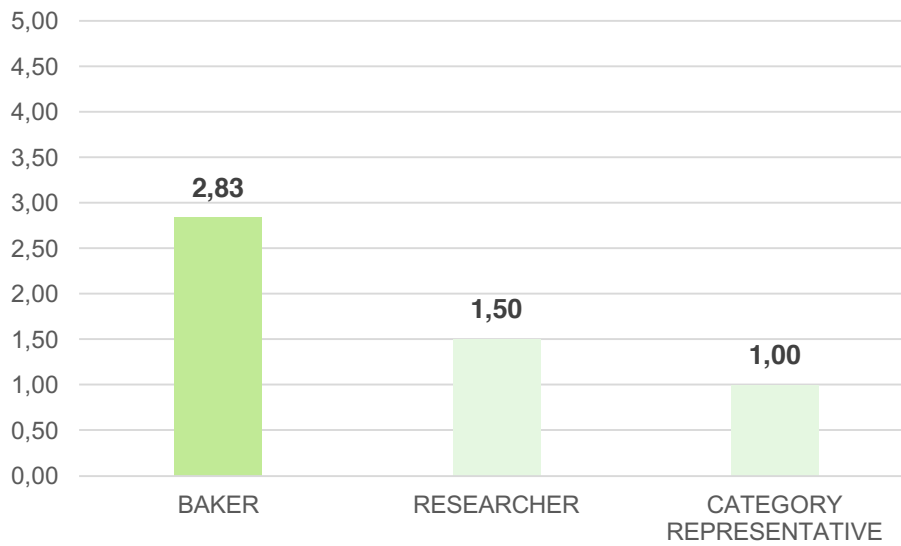
3.3.7. Competition

The category concerning competition has an almost neutral impact in the analysis, being it perceived neither as an opportunity nor as a threat. The reason for this is to be traced back to primarily two aspects that offset one with the other: on the one hand, competition against similar activities is perceived as an opportunity, while on the other competition against large distribution channels is believed to be a heavy threat. An additional aspect considered is the contribution of substitute goods, which has an impact close to zero in the global result.

3.3.7.1. Competition from similar firms

The first aspect to consider is competition from similar activities of similar dimensions. Differently from one could imagine, this form of competition does not represent a threat, rather most of the interviewees agreed on considering it as an opportunity (1,44), as represented in Graph 3.10.

Graph 3.10 Competition from similar firms by category of stakeholder



Source: Elaboration on data collected from interviews

In effect, colleagues from this environment are described as friendly and cooperative, always willing to share advice to one another. We can assume this is a natural consequence of the fact that the products sold are not standard thus every single bakery tends to have its own customer cluster in the same geographical area, so there is awareness on the fact that some customers may prefer the products of a bakery with respect to those of another. It should also be added that loyalty in this sector is an essential element so once a bakery gets a loyal customer base, it is difficult for them to buy from a competitor because they know those products are perfectly in line with their tastes.

Another aspect to consider is that the number of active firms operating in this field is diminishing, so competition should be less intense for a merely numerical reason, with a know-how that is almost impossible to replicate.

Clearly, the impact on the volume of sales clearly depends on whether there are similar activities nearby, especially in small towns. If this is the case, it is important for a bakery to be able to create its own brand so as to be recognizable and

distinct irrespective of how intense competition is. A brand identity is the image the company wants to convey to its customers, and it is the result of the combination of several elements, including the name, logo, mission, style and payoff. Studying the development of an adequate brand identity can be useful for the purposes of conveying a message (in this case, highlighting the types of products you want to concentrate on, in order to meet your desired target of consumers), of being distinguishable from competitors (shedding the light on what you have that cannot be found in other bakeries, or what you make better), and may also be helpful to appear more professional and contemporary than the others, as having a developed brand identity would mean having a clear idea of what the firm wants to be.

If the question then is how to be different from the others, strategies for differentiation shall be investigated. Differentiation in this sector may come in the form of product or format: in the former case one tries to develop an original product to become associated with its name; in the latter the key concept is to innovate the service by providing customers with something they are not accustomed to. However, there are many variables that may influence this process, including the geographical positioning and the customer base composition.

3.3.7.2. Competition from large-scale retail trade

On the contrary, competition from the large-scale retail trade is negatively seen (-2,07) due to the large market share it takes away from small bakeries, leveraging on a wide offer of several bakery references that are available all the day long thanks to a continuous cooking cycle. These products are typically very good-looking, they smell good and they can even be slightly warm thanks to the fact that they are always fresh from the oven. However, this appetizing aspect generally hides some black holes of the production aspect: in most cases, it is a bread that is imported from Eastern/Central Europe, while frozen, being just browned off locally.

Problems on this issue are mainly due to two aspects: first, it is not mandatory to indicate the country of origin of the product, while if this was the case, the final impact on customers would be different, with people probably having more doubts on whether to buy the products or not; secondly, marketing activities around these products are quite relevant, with the positioning of bakery products often just at the entrance of the shop to encourage people to buy them, a good-looking appearance and contained price (e.g., 0,50€/piece); in effect, these products are often used to attract the customer to the supermarket, turning upside down the paradigm according to which the customer buys bread at supermarkets because he/she needs to do the shopping in any case, but rather he/she is attracted to the supermarket thanks to the wide availability of breads. The self-service solution is often a good choice when the customer wants to personally analyze and choose the product, while the assisted service is an added value for big-size products that need to be portioned.

In any case, all of this comes with the result of an undervaluation of the artisanal product, which, in those cases where it is sold to local supermarkets, is not adequately promoted in the eyes of customers. Therefore, the question to be investigated is whether it is worthy to invest additional labor for supplies to supermarkets: which are the resulting marginal costs and marginal revenues? In case the latter results to be greater than the former, then it will be convenient to pursue this path, otherwise not.

To protect the quality of artisan products, Sentence n° 6677/2021 by the State Council in Italy states that pre-cooked bread within the large-scale retail distribution must not be sold singularly or in a self-service way, but needs to be pre-packaged, in a way such that it can be distinguished from fresh bread.

3.3.7.3. *Substitute goods*

The last aspect to consider concerning this category are substitute goods²⁰: they are slightly perceived as an opportunity (the average is equal to 0,13) although opinions are conflicting on this (the Contrast Index is equal to 0,9).

In 2020, Italians spent 1,5 billion euros in bread substitutes, with a registered increase in sales equal to 6,6%; 25% of this expenditure was for industrial sliced bread, a 15% was for crispbreads and another 15% was for specialties such as “piadina” and similar²¹.

In effect, at a first sight, they may be perceived as a threat (roughly 50% of interviewees believe so) due to the fact that they take some market share away from the bread product. In fact, they represent some tasty and always available substitutes, which can be stored for very long periods and be consumed when necessary.

On the other hand, this can be seen as an opportunity for two main reasons: the fact that the types of available substitute products have been exponentially increasing in recent years can work as a motivation and incentive for bakers to think about some new possible types of foodstuff. In addition, they represent an opportunity for increasing sales, if bakeries themselves are able to provide customers with these products: they have the advantage of being quite rapid to produce and they allow larger margin for profit; in this sense, they may be viewed as a threat against the product bread itself, but as an opportunity for bakeries as a whole.

²⁰ Substitute goods can be defined as all those comparable goods that satisfy the same needs of customers.

²¹ Source: IRI (2020)

Another consideration is that, if people decide to reduce their consumption of bread for nutritional reasons, then it makes no sense to increase the consumption of substitute goods, which surely have a worse nutritional profile, containing a higher percentage of fats, more salt and an overall lower satiating power with respect to common bread. This would mean that there are some misunderstandings to the nature of bread products. Moreover, bread, especially in Italy, has a strong cultural value that can never be replaced by its substitutes (e.g., using bread as “*scarpetta*”). A more significant threat, on the contrary, may be represented by those products with a lower glycemic index (e.g., rice cakes / Wasa crispbreads etc.) which may better meet the needs.

3.3.8. Structure of the Industry

The analyzed category concerning the structure of the industry has an overall quite neutral impact, being its average value equal to 0,73, thus we can consider it as a slight opportunity. There are two different aspects within this group, namely the sector fragmentation and the average dimensions of firms operating in it, which are further described in the following paragraphs.

3.3.8.1. Industry fragmentation

First, a fragmented sector is defined as a sector composed of several firms in competition one with another, in which none of them possesses a dominant market share.

In effect, if we exclude from this analysis firms operating at the industrial level which would deserve a separate and dedicated examination, we know that in the Region Veneto there are roughly 2.000 artisan firms that operate in this field, with none of them being prevalent over the others. This feature is overall thought of as an opportunity, in fact its average value is equal to 1,53, but at the same time

there is a high disagreement on it, as shown by the highest possible Contrast Index equal to 1.

The explanation for this is that, if there was a dominant firm, it would mean that a large share of customers bought goods mainly from one firm, which would need to substantially increase its volumes of production, and this would not be compatible with artisanship. Therefore, a high fragmentation is a form of guarantee of the artisanship and authenticity of the products. Moreover, thanks to this organization, it is likely that each bakery has its own range of customers appreciating their products rather than those produced by another firm with the consequent possibility of following in a more dedicated way customers and their needs.

From another perspective, this issue can be regarded as a threat instead, because it implies a weak representation of the category at a national level, with no space for lobbying opportunities and the consequence that there is only limited room for listening and providing solutions to the needs of these businesses at a macro level. Moreover, this structure comes with some unavoidable inefficiencies, since there is typically one production site for every distribution point, meaning that fixed costs of production can hardly be split across several distribution channels.

3.3.8.2. Average dimension of firms

The second aspect to consider, which is strictly related to the former, is that this industry is made up mainly of small-to-medium-sized companies (among those ones directly involved in this analysis, only two count more than 10 employees). The problem in this case are missing scale economies, with costs being more difficult to absorb and a reduced bargaining power with suppliers.

All of this is often combined with an incumbent and concentrated workload for the owner, not allowing flexibility in terms of personnel: one employee leaving could

mean bottlenecks and replacements are more difficult to manage than what they would be in larger organizations.

These are the main reasons why this aspect is perceived as a negative point, but just in a contained way (-0.07): the fact of being small is consistent with the main lever of these businesses, which is the quality of products and the service offered. This is to say that it could not be otherwise, as the dimension is inherent to the nature of these firms, allowing direct and personalized contacts with customers. Another advantage is that smaller dimensions allow easier adjustments to market trends and needs: once the commercial direction understands the sale needs, production can be modified accordingly.

3.3.9. Initiatives for product valorization

This category is mainly concerned with all those initiatives that should be aimed at product valorization. The situation arising from the analysis is one of opportunities that are not really efficient in pursuing this purpose (0,98). Category representatives have demonstrated to be the more informed on this aspect, but their opinions also capture a strong disillusionment since they are those who mostly perceive how these initiatives have been failing.

3.3.9.1. Quality trademarks for product valorization

The first and most relevant aspect to be analyzed within this section is connected to the introduction and use of quality brands, which are represented here with an average of 1,27, meaning that they are obviously thought of as opportunities, but their impact could potentially be much more positive.

In 2015, the trademark “*Forno di Qualità*” was created to be assigned to those bakeries producing fresh bread, namely a bread produced according to a continuous production process, without any interruptions for freezing or without a prolonged storage of raw materials and sold, in any case, not beyond 48 hours

from the conclusion of the production process²². This trademark assures that the bread is made with ingredients according to the law, with a percentage of yeast that does not exceed 3% and by using only flours that are allowed by Community legislation. If added with condiment, it must be exclusively virgin olive oil or virgin lard. The production process must be based on the indirect method and the proofer must be used just for a maximum period of 72 hours with the only purpose of slowing down the leavening process, but not stopping it.

As at February 2022, only 18 bakeries (0,1% of the total) in the whole Region resulted to be concessionaires of this brand, (including one that took part in the interviews) so we can conclude this initiative has not had a relevant impact. The reasons for this can be traced back to three main ideas:

- (1) Sometimes, these types of initiatives are not effectively managed: there are little incentives to take part in them and there is confusion around them;
- (2) Usually they are not adequately promoted, as demonstrated by the fact that the majority of interviewees was not aware of the existence of “*Forni di Qualità*”. It would be more useful if such an initiative was promoted at a national level, with a committee in charge for the active and constant monitoring of the respect of requisites, in order to have an effective collective rebranding of the product with a wider national perspective.
- (3) Among the other prerequisites for getting the trademark, it is necessary that all the productive phases have to take place within the bakery, including the preparation of raw materials and that no semi-finished or intermediate product can be used. This means that, for instance, a

²²For further details: <https://www.regione.veneto.it/web/attivita-produttive/marchio-forno-di-qualita>

prepared mix of flours cannot be used and this is something that commonly occurs.

3.3.9.2. Quality trademarks for customer's orientation

It was also worth investigating whether these branding initiatives would be useful to help customers' orientation. The average result was similar to the previous one (1,40): quality trademarks would surely be a form of added value and this is undeniable, but their weight on the choice of going to a bakery rather than another would be limited (10 / 20%).

In effect, this sector is really moved by personal preferences and tastes and by customer loyalty so a customer that currently enjoys the product of a specific bakery would not change its habits just for the presence of such a trademark. Nonetheless, it is a certification of quality that may affect the choices of those who are remarkably interested in the quality of what they eat. In any case, as at today, we are missing the grounds for making such an initiative effective, which is awareness among clients: there is confusion around this issue, starting from bakers themselves, and there is almost no official communication around, with the consequence that the attention paid towards these proposals by customers is only limited.

3.3.9.3. Impact of Covid-19 pandemics

Finally, we are considering aspects concerning the interest for the sector in general, also created by the pandemic events. This topic is rated by stakeholders as a minimum opportunity, with an average equal to 0,27.

In effect, in 2020, people became interested in this sector in the very short term, affected also by the variable that it was not possible, in that period, to move long distances due to government-imposed lockdowns. For this reason, the small bakery in town assumed a key role for daily life necessities. According to a

researched by AIBI (2020), there were three main phenomena that affected the importance of this activity during that period:

- (1) The interest towards locally produced goods according to traditional techniques and the attention for raw materials;
- (2) The delivery service, which assumed a key role during lockdowns and which has incentivized the baker to improve its presence on social media to spread knowledge of this service;
- (3) The increasing care for sustainability matters, to be seen on packaging, the use of renewable energy, and on the attention towards waste.

In any case, the effects of opportunities arising from pandemics are not thought to be particularly valid in the long run: as the situation is gradually going back to normal the exposure of these themes is declining. However, this event may have triggered some reflections about the nature and effort required to produce these goods, thus being an occasion for increasing some awareness on it.

3.3.10. Market

This section includes questions related to the labor market, opportunities for innovation, and changes in the workload as related to the pandemics. The overall outlook on this is slightly negative, with an overall value of -0,36, that is particularly affected by issues concerning the labor market, namely one of the biggest threats for this sector.

3.3.10.1. Innovation

Starting from innovation, it emerges as a great opportunity (2,20) although with some disagreement among the interviewees.

We can consider innovation from three different perspectives: product, organizational and commercial.

Starting from the product, we have to reflect on the fact that bread is a simple and old product, so its nature can never be twisted. However, it is possible to think about some original improvements, trying to understand the customer needs and looking for differentiation, for example by understanding niches, implying a production process that is flexible and easy to modify at the occurrence. Actually the market has many different needs that could be served, from gluten-free to special grain breads; there is also the need of providing a product with a long shelf life because people are not willing to buy fresh bread each day. In any case, it is important that these features are properly communicated, so as to highlight the product's qualities vis-à-vis people's requests.

The second aspect concerns organization, with innovation that should be aimed at improving and ameliorating the bakers' quality of life. It may be intended as an adjustment to time schedules to reduce the night workload as much as possible. This could be possible thanks to a dedicated review of processes and to the use of instruments such as proofers and programmable ovens that should make the work less physically tiring. Another opportunity that is more and more often applied especially by younger bakeries is on-demand work, with production being based primarily on bookings, allowing to produce what is strictly necessary without any useless waste.

Finally, from the point of view of sales, we have collected different opinions: on the one hand, someone suggests that current sales strategies are adequate to the nature of the business, while, on the other side, somebody else would prefer to investigate new developments related to digital and e-commerce. However, costs for the implementation of the latter solutions are quite high and they require the intervention of expert professional figures to make them a valid alternative. In any case, there must be a detailed study of the customer base to understand whether it would be a solution that is worth to be followed or not: as at today, it is a solution proposed by the most innovative bakeries, often recently-born ones, which create some online shops to sell especially those secondary products that

are easier to store. For the purpose of increasing sales volumes, it is also important to pursue some advertising strategy to intercept new customers, especially those belonging to the younger cohorts (the older are already accustomed to buy from bakeries): it is important to consider the role played by social media, which may help to convey transparent messages on how production happens. Loyalty of customers shall be another priority, with the purpose of overpassing competition from large supermarkets. An innovative format and a good-looking space may also be an objective, as it is necessary to overcome the old concept of a bakery where one goes in and then immediately exits, but rather it should become more and more a place for sharing, where people can go for a break or for study/work purposes.

Finally, it could be important to study alternative methods of payment, that allow to reduce costs for POS and bank commissions, whose amount may become a considerable one at the end of the month. As an example, Satispay does not apply any commission for transactions smaller than 20€, which is perfectly suitable to the average expense occurring for this type of product.

3.3.10.2. Labor Market

Another aspect to consider is the labor market, on which stakeholders agree to say it represents an important threat that is difficult to eradicate as can be seen from Graph 3.11.

Graph 3.11 Labour market by category of stakeholder



Source: Elaboration on data collected from interviews

Problems regard mainly the profiles of people in charge of production, with no difficulties reported for sales figures instead. In particular, the most relevant hurdles are due to:

- (1) Non-standard hours of work, but rather still night-based shifts: people, especially the youngest, have some difficulties in approaching this reality, which has often to be summed up to the fact that it is necessary to work at weekends or during holidays, meaning that a great commitment is required. Until some years ago, this lack of personnel was partially fulfilled by immigrants, who used to have the real urgency of having a job; however, it is no more like this so the situation for those who need new collaborators has become even harder today.
- (2) In cases when they manage to find someone, it is never a qualified person, since schools and education are not sufficiently preparing students to do this job: it is not technicalities that are missing, but rather the approach that is necessary to face this job; an increased coordination with cooking

schools would be necessary, as they usually do not have a specific curriculum for this sector.

- (3) It is a job with no universal rules, but rather very experience-based. It is necessary for the employer to train new employees, which remains an important commitment to consider and which may be a burden if this person decides to leave the job after a limited period of time.

3.3.10.3. Impact of Covid-19 Pandemics on workloads

To conclude, some considerations on the amount of work are also made, with a particular insight on how the pandemics changed this pattern. The impact of this aspect is quite neutral (0,40), meaning that in substance it does not represent neither a threat nor an opportunity.

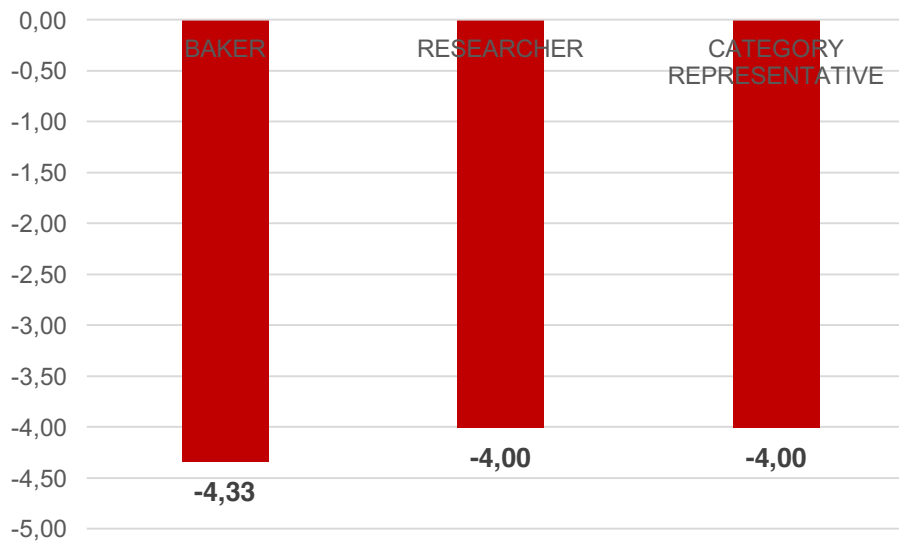
People involved in the interviews were quite unanimous in saying that working rhythms today are different from how it was in the past, when production was much more intense because the demand for bread was higher and because there were less technological tools that could help, meaning that it was tougher also from a purely physical point of view.

Covid-19 pandemics has partially changed the equilibria they were used to, with sudden increases in workloads but at an irregular pace and with some consequent difficulties (e.g., one day they sold all the bread in two hours, but the next day this was not the same, so it was difficult to plan production). Although that period has represented, for some bakeries, an opportunity to increase sales due to the fact that small shops nearby regained importance during lockdowns, and to gain some new customers that were not used to buying there, the effects have almost completely disappeared once the core emergency has been passed.

3.3.11. *Bureaucracy and taxation*

To conclude, the last category included in this analysis concerns bureaucracy and taxation, which together represent two important burdens as demonstrated by the very negative valuation assigned to this category (-4,11).

Graph 3.12 Bureaucracy and taxation by category of stakeholder



Source: Elaboration on data collected from interviews

One of the aspects that were considered the most negatively impacting, stakeholders pointed out all the mandatory updating training that all the employees need to attend on a regular basis (safety on workplace, HACCP, technical responsibility etc.). In effect, 74% of the interviewees believe that training is not necessary as the staff is already trained, while 13% of them think that the costs for it are too high. Actually, this belief is further confirmed by ISTAT (2015) at a more general level, considering that 76% of small enterprises with 10 to 19 employees reckon that personnel do not need to be trained, while this is thought in just 36% of enterprises with more than 1000 employees. According to an analysis lead by the same ISTAT (2015), it is estimated that the average hourly

cost of training activities is 57€ per hour²³, considering direct costs for external services and infrastructure and lost working hours, which in these realities, mean a missed earning.

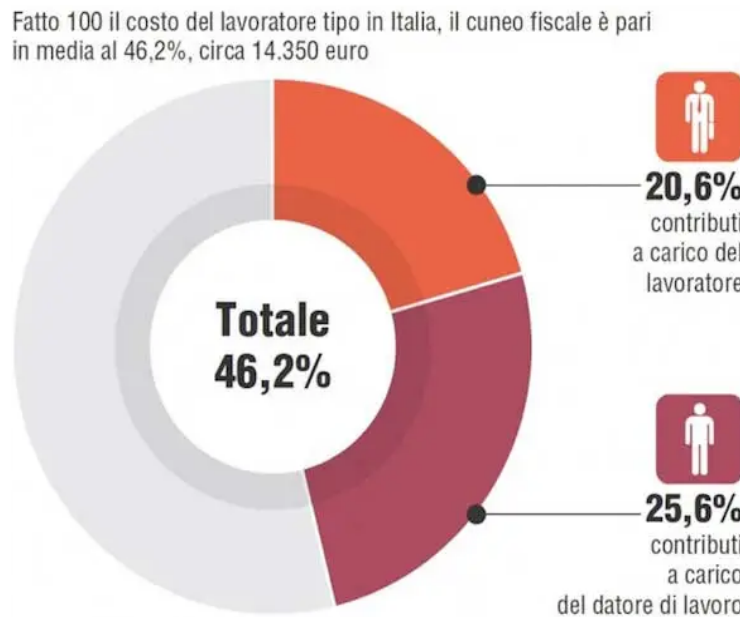
In addition, another aspect to consider as a burden is the cost of salaries, that do not weight for the compensation itself, but for all its additional costs: as we know, the main entries that make up the personnel cost are:

- The gross annual income
- Social security contributions up to the employer
- Severance pay
- Any other cost related to the management and to the performance of the job (e.g., administrative expenses, benefits and welfare expenses, costs for training etc.)

The tax wedge is the difference between the gross wage paid by the employer and the net compensation received by the worker and it is computed as the sum of all taxes (direct, indirect and social security ones) that affect the cost of labor. It can be conceived as an indicator of how much the taxation influences the income. From a 2020-based analysis by OECD in 37 countries, the average tax wedge in European Countries is around 35%, with Italy being among those countries above the average at 46%, as presented in Graph 3.13. A higher tax wedge clearly means higher personnel costs for employers but also for employees, and if it was reduced, it would mean higher employment possibilities, higher disposable incomes therefore more investment possibilities.

²³Data reported in <https://www.istat.it/it/files//2017/10/Formazione-nelle-imprese-2015.pdf>

Graph 3.13 Italian tax wedge



Source: elaboration on ISTAT (2020)

In Italy, some possible alternatives to optimize this cost component are to fund solutions for training, tax reliefs for particular categories of workers, to use benefits such as meal or fuel vouchers and to envisage some facilitations depending on the contractual forms, but in any case it would be appropriate to ask for the consultation of special consultants on these topics.

Some other aspects concerning bureaucracy are the electronic invoicing, although those having a smarter approach have suggested it can be a good solution to reduce the number of necessary appointments with the accountants, allowing a more direct contact with them and reducing the risk of errors.

Finally, being this activity one that operates in the food industry, it is subject to periodic controls on the respect of hygiene regulations and protocols.

CONCLUSION

The purpose of the present study was to provide a detailed analysis of the current status of Italian artisan bakeries in Italy with an empirical focus on the situation in the Veneto Region. The prevailing approach to this study was a managerial and organizational one, trying to understand perks and drawbacks about the way it is currently done in this sector.

In Chapter 1, we tried to provide some insights on the bakery market both in Italy and in the Veneto Region, with the purpose of grasping which are the main drivers regulating demand and supply, pricing and international exchanges of the major bakery products.

In Chapter 2, a brief literature review helped us to understand the reasons behind consumption choices and pricing strategies.

Finally, Chapter 3 was the most substantial part of the thesis, dealing with an empirical research conducted among several stakeholders of the sector in the Veneto Region, with the aim of getting a deeper knowledge of the reality of this type of business. This investigation helped us to realize which are the strengths and opportunities that should be better exploited to be successful, but also which are the weaknesses and threats whose effect should be taken into account and possibly solved to make the business model more profitable and efficient.

To conclude, we can briefly discuss the aspects that have emerged as improvable and give some advice on the basis of what has come to light during the previous discussion.

Managerial skills among bakers and owners of these firms have proved to represent a weakness on which there is a widespread awareness. What we suggest in this regard is to adopt a less improvised and more analytical approach. It is important first of all, to be aware of the actual state of the art from which an improvement shall be looked for, without necessarily keeping attached to the

current conditions. Decisions shall be taken on the basis of clear data and of credible forecasts for the future. Contamination of ideas is essential to renew the business pattern: it is important to be ready to welcome any new point of view in order to adjust to prevailing trends, showing the ability to change according to market conditions.

Another highlighted negative aspect concerns cost management. On the one hand, we can't do anything but accept some price dynamics related to raw materials and utilities in particular, which are generally dependent on uncontrollable market dynamics and international contexts; on the other hand, it is essential to use all the available resources and tools to face situations of sudden and steep price increases. The first thing we suggest is a more accurate planning process for production, that may contribute to the optimization of resources and to avoid useless and costly waste. In order to do so, the customer demand shall be identified first: which are the products your customers want to buy? Which is the quantity, for every different product, that is likely to be sold each day? These questions shall be answered as precisely as possible and the best way to do it, in this context, is by keeping an updated record of the past sales in order to understand which are the expected trends. Once these data are available, the production process should be adjusted, aiming at the optimization of time and resources to be employed. Next, an adequate pricing activity shall be carried out, allowing the entrepreneur an honest margin on sales: if market conditions do not allow it, selling prices shall not necessarily be kept sticky, but rather they should be modified according to the needs.

Finally, a greater attention should be paid to strengths. More specifically, since the product itself is a key element in this context, a better promotion around it would be beneficial. In effect, bread has been experiencing a decline in the last decades and a new promotion around it shall be carried out to create a new image of it in customers' minds. Exploiting the atmosphere of cooperation that exists between operators in this sector, a new cultural wave should be promoted relying

on the product-related points of strength that we have discussed in the previous chapter (i.e., all the qualitative aspects which make it a better product than its industrial competitor) and on what makes the difference. To this regard, communication processes may play an important role, involving adequate promotion and *ad hoc* advertising, not improvised but rather well-defined and studied on the basis of the target. In particular, given the features of today's customers, who are more-than-ever informed and careful towards what they eat. It is fundamental then to be able to communicate as much information as possible concerning the production process, the nutritional aspects of the products, the origin of raw materials and any other additional feature which may be relevant for the satisfaction of customers' needs.

These results were obtained thanks to the contribution of a sample of fifteen stakeholders having a knowledge of this sector in the Veneto Region. To get more information, it would be useful to extend the process to more companies and to envisage some room for discussion among interviewees themselves, in order to have a better elaboration of the ideas presented here, new possible hints and to assess the feasibility of what has been proposed.

BIBLIOGRAPHY

ASSIPAN, 2020, Dati Panificazione 2020, Roma.

Angelino, D., Rosi, A., Ruggiero, E., Nucci, D., Paoletta, G., Pignone, V., Pellegrini, N., & Martini, D., on behalf of the SINU Young Working Group. (2020). "Analysis of food labels to evaluate the nutritional quality of bread products and substitutes sold in Italy: results from the Food Labeling of Italian Products (FLIP) Study". *Foods*, 9(12), 1905.

Arvola, A., Lähteenmäki, L., Dean, M., Vassallo, M., Winkelmann, M., Claupein, E., Saba, A., & Shepherd, R. (2007). "Consumers' beliefs about whole and refined grain products in the UK, Italy and Finland". *Journal of Cereal Science*, 46(3), 197-206.

Cacciolatti, L., Revoredo-Giha, C., Lamprinopoulou, C., Toma, L., Teahan, B., & Leat, P. (2009). *Cereal prices, bread consumption and health in Scotland*, work presented at the 83rd Agricultural Economics Society (AES) Annual Conference, Dublin, March 30th - April 1st 2009.

Camilli, E., Catasta, G., del Balzo, V., Lucchin, L., Marconi S., Martone, D., Mattera M., Piccinelli, R., Scalfi, L., Ticca, M., Toti, E., & Troiano, E., (2017). *Linee guida per una sana alimentazione*, CREA, Dossier Scientifico 2017

Chiriaco, M. V., Grossi, G., Castaldi, S., & Valentini, R. (2017). "The contribution to climate change of organic versus conventional wheat farming: A case study on the carbon footprint of wholemeal bread production in Italy". *Journal of cleaner production*, 153, 309-319.

Consiglio di Stato, Sentenza n° 6677/2021, 7 Ottobre 2021, *Preconfezionamento obbligatorio del pane precotto e congelato*.

David, C., Abecassis, J., Carcea, M., Celette, F., Friedel, J.K., Hellou, G., Hiltbrunner, J., Messmer, M.M., Narducci, V., Peigné, J., Samson, M., Schweinzer, A., Thomsen, I.K., & Thommen, A. (2012). "Organic Bread Wheat Production and Market in Europe", in Lichtfouse, E., *Sustainable Agriculture Reviews* (a cura di), vol 11. Springer, Dordrecht.

De Boni, A., Pasqualone, A., Roma, R., & Acciani, C. (2019). "Traditions, health and environment as bread purchase drivers: A choice experiment on high-quality artisanal Italian bread". *Journal of cleaner production*, 221, 249-260.

De Stefano, S., Silano M., & De Martino, M., (2019), Relazione annuale al Parlamento sulla celiachia, Roma, December 2020.

Drugova, T., Curtis, K. R., & Akhundjanov, S. B (2020). "Organic wheat products and consumer choice: a market segmentation analysis". *British Food Journal*, 122(2020), 2341-2358.

Gracia, A., & T. de Magistris. (2007). "Organic food product purchase behaviour: a pilot study for urban consumers in the South of Italy". *Spanish Journal of Agricultural Research*, 5(4), 439-451.

Italiana, L. (1967). Legge n. 580, 4 Luglio 1967. *Disciplina per la lavorazione e il commercio di cereali, degli sfarinati, del pane e delle paste alimentari*. GU, (189).

Krystallis, A. & Chrysohoidis, G. (2005). "Consumers' willingness to pay for organic food: Factors that affect it and variation per organic product type". *British Food Journal*, 107(5), 320-343.

Linstone, H. A., & Turoff, M. (1975). *The Delphi method: Techniques and Applications*, Reading, Mass.: Addison-Wesley, Advanced Book Program, 3-12.

Mauracher, C., & Trevisan, E., (2007). "Nota metodologica: l'uso dei dati qualitativi nelle analisi socio-economiche territoriali". In Zanolì, R., (A cura di), *Le*

politiche per l'agricoltura biologica in Italia. Casi di studio nazionali e regionali.
Ed. Franco Angeli.

Mentella MC., Scaldaferrì F., Ricci C., Gasbarrini A., & Miggiano G. A. D., (2019).
“Cancer and Mediterranean Diet: A Review”. *Nutrients*, 11(9), 2059.

Mialon, V. S., Clark, M. R., Leppard, P. I., & Cox, D. N. (2002). “The effect of
dietary fibre information on consumer responses to breads and “English” muffins:
A cross-cultural study”. *Food Quality and Preference*, 13(1), 1-12.

Moro Visconti, R. (2020). “The Valuation of Know-How”. *The Valuation of Digital
Intangibles*, 111-126. Palgrave Macmillan, Cham.

Notarnicola, B., Tassielli G., Renzulli, P.A., Castellani V., & Sala S. (2017)
Environmental impacts of food consumption in Europe, *Journal of Cleaner
Production*, vol. 140, 753-765.

OXFAM (2016). *Annual Report 2016*, available at
[https://www.oxfamamerica.org/explore/research-publications/annual-report-
2016/](https://www.oxfamamerica.org/explore/research-publications/annual-report-2016/).

Ricci, E.C.; Peri, M.; & Baldi, L. (2019). “The Effects of Agricultural Price Instability
on Vertical Price Transmission: A Study of the Wheat Chain in Italy”. *Agriculture* 9,
36(2).

Sajdakowska, M., Gębski, J., Żakowska-Biemans, S., & Jeżewska-Zychowicz, M.
(2019). “Willingness to eat bread with health benefits: habits, taste and health in
bread choice”. *Public health*, 167, 78–87.

Trabuio, G., (2004). “Il metodo Delphi: Metodologie e applicazioni per la
conduzione di interviste finalizzate alle decisioni”. Lecture notes.

Tuomisto, H. L., Hodge, I. D., Riordan, P., & Macdonald, D. W. (2012). "Does organic farming reduce environmental impacts? A meta-analysis of European research." *Journal of Environmental Management*, vol. 112, 309-320.

Zoani, C., Benassi B., Fiorani, L., & Bevivino, A., (2020). "Sicurezza alimentare, qualità del cibo e salute", *Energia, ambiente e innovazione*, 69-72.

SITOGRAPHY

AIBI, <https://www.aibi.eu/wp-content/uploads/AIBI-Bread-Market-report-2012.pdf>

ANSA, https://www.ansa.it/canale_terraegusto/notizie/in_breve/2020/10/26/pane-al-tempo-del-covid-vince-il-fresco-e-di-prossimita_1eb9d043-b223-4fbd-a794-f67ac29fc3f0.html

Aosta Cronaca, <https://www.valledaostaglocal.it/2020/10/28/leggi-notizia/argomenti/economia/articolo/gli-italiani-la-pandemia-e-il-consumo-di-pane.html>

Coldiretti, <https://www.coldiretti.it/economia/raddoppia-limport-di-grano-canadese-96>

CREA, https://www.crea.gov.it/documents/59764/0/Dossier+LG+2017_CAP10.pdf/627ccb4d-4f80-cc82-bd3a-7156c27ddd4a?t=1575530729812

ENEA, <https://www.enea.it/it/seguici/pubblicazioni/pdf-eai/n-1-gennaio-aprile-2020/focus-sicurezza-alimentare-qualita-del-cibo.pdf>

Harvard Education, <https://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/whole-grains/>

Il Post, <https://www.ilpost.it/2021/09/14/aumento-bolletta-energia-elettrica-gas/>

Il Post, <https://www.ilpost.it/2022/01/27/russia-europa-gas-ucraina/>

ISMEA, <https://www.ismeamercati.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/9897>

ISMEA, <https://www.ismeamercati.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/3118#Menu>
[V](#)

ISMEA, <https://www.ismeamercati.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/3524#Menu>
[V](#)

ISMEA,

<https://www.ismeamercati.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/2063>

ISMEA,

<https://www.ismeamercati.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/9493>

ISMEA,

<https://www.ismeamercati.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/9897>

ISMEA,

<https://www.ismeamercati.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/4600>

ISTAT, <http://dati.istat.it/Index.aspx?QueryId=33702>

ISTAT, <http://dati-censimentoindustriaeservizi.istat.it/Index.aspx>

ISTAT,

<http://dati.istat.it/viewhtml.aspx?il=blank&vh=0000&vf=0&vcq=1100&graph=0&view-metadata=1&lang=it&QueryId=37348>

ISTAT,

<http://dati.istat.it/viewhtml.aspx?il=blank&vh=0000&vf=0&vcq=1100&graph=0&view-metadata=1&lang=it&QueryId=17912>

ISTAT,

http://dati.istat.it/viewhtml.aspx?il=blank&vh=0000&vf=0&vcq=1100&graph=0&view-metadata=1&lang=it&QueryId=23778&metadata=DCSP_SBSNAZ

ISTAT, <https://www.istat.it/it/files//2017/10/Formazione-nelle-imprese-2015.pdf>

Istituto Superiore di Sanità, <https://www.epicentro.iss.it/en/coeliac/annual-report-Parliament-2019>

Italmopa, https://www.italmopa.com/wp-content/uploads/2020/01/Conferenza-Italmopa-Sigep-2020_Comunicato-stampa.pdf

L'Arena, <https://www.larena.it/argomenti/economia/un-marchio-per-il-pane-fresco-veneto-1.3167691>

Ministero della Transizione Ecologica, <https://dgsaie.mise.gov.it/importazioni-gas-naturale>

Molini d'Italia,

https://issuu.com/avenuemedia.srl/docs/molini_03_2020?fr=sMzAxYjk5MzM5MA

Osservatorio Prezzi e Tariffe, <https://osservaprezzi.mise.gov.it/prezzi/livelli/beni-e-servizi-di-largo-consumo/archivio-rilevazioni-beni-e-servizi-di-largo-consumo>

Ottopagine, <https://www.ottopagine.it/italia/economia/285801/guerra-in-ucraina-coldiretti-dal-grano-al-pane-il-prezzo-aumenta-di-13-volte.shtml>

Project Icarus, http://proiect-icarus.ro/wp-content/uploads/2018/12/Bakery_and_Bakeoff_market_study.pdf

Regione Veneto, <https://www.regione.veneto.it/web/attivita-produttive/marchio-forno-di-qualita>

Slideshare, <https://www.slideshare.net/Antvox/marketing-per-i-prodotti-da-forno>

Teseo by CIAL.it, https://teseo.clal.it/?section=conf_cereali