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THE ATTRACTIVENESS OF LOCAL FOOD SOURCING FOR RETAILERS IN PORTUGAL

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Abstract

This work project analyses the overall attractiveness of local food sourcing for retailers in

Portugal and how this is affected by their size or strategy. Open-ended surveys to various

retailers showed that this corporate social responsibility practice is a business priority and

guarantees freshness and quality when goods come directly from producers. Consumer surveys

demonstrated a preference for national products. However, uncompetitive prices and scarcity

are a significant setback to both retailers and consumers. Ultimately, local sourcing's

attractiveness is not identical for every business as they do not possess the same resources and

capabilities to exploit its potential.

Keywords: Supply Chain Management, Local Sourcing, Food Retail, Portugal

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1.Introduction

Despite international sourcing's rising popularity, local sourcing of fresh food has emerged as a concern for both consumers and companies, and national production faces a new reputation. Consumers are demanding transparency (The Food Marketing Institute, 2018) while becoming more environmentally conscious (Galli and Brunori, 2013). All together makes them heavily interested in practices such as local sourcing. Moreover, companies are becoming increasingly aware of corporate social responsibility (CSR) and do not want to fall behind competitors (Agudelo et al., 2019). There has been a growth in the supply of national products, awareness campaigns, and initiatives to buy locally in Portugal.

Recent literature focuses on the benefits of having a network of international suppliers, while local sourcing is commonly seen as a social practice with a number of weaknesses. Companies resource to national or regional suppliers so that they can help the economy grow. Nonetheless, in theory, this practice appears to present other advantages in terms of costs. Local sourcing is expected to decrease distribution costs and lead time if compared with international sourcing (Handfield, 1994). At the same time, it enhances control over the supply chain (KFW DEG, 2018) and consumers' willingness to pay (Carpio and Isengildina, 2009). Overall, a local network of suppliers may constitute an opportunity to exploit profits and sustain a competitive advantage.

This thesis aims to study supermarkets and small retailers in Portugal and their local procurement practices regarding fresh products. The goal is to evaluate local sourcing's overall attractiveness for retailers despite their size or strategy- research problem. The analysis will be completed once the following questions are clarified: 1. What is the role of sourcing locally for retailers' businesses?; 2. What are the experienced benefits of sourcing locally?; 3. What is stopping retailers from sourcing heavier from local suppliers?; 4. How do customers feel about local sourcing?.

The focus on the food supply chain was selected due to its complexity. Fresh foods are perishable, seasonable, and require careful transportation and fast lead time. Hence, relying on national suppliers and having the production closer to the final consumer seems to increase retailers' overall performance and is relevant enough to be deeply analyzed.

2.Literature Review

Sourcing in the Supply Chain Management

The definition of "Supply Chain Management" (SCM) is relatively recent. It was approached for the first time on literature in 1982 by Oliver and Webber. Since then, many concepts have emerged, giving rise to different perspectives. A common interpretation says that SCM is "the network of entities through which material flows. Those entities may include suppliers, carriers, manufacturing sites, distribution centers, retailers, and customers" (Lummus and Alber, 1997). In 1997, Quinn defined it as the set of activities associated with moving goods from the raw materials stage through the end-user.

Sourcing is one of the first activities of the chain. It is commonly defined as the "set of businesses required to purchase goods and services," including supplier assessment, selection, negotiation; design collaboration; procurement planning; and analysis. The growing importance of such a concept gave rise to a new one: Strategic Sourcing. It aims at developing long-lasting relationships through supplier involvement initiatives and continuous feedback (Talluri and Narasimhan, 2004).

Food Supply Chain

Procurement decisions and supplier relationships become significantly relevant when narrowing to the food supply chain. Unlike any other chain, in the fresh food supply chain, products are perishable, fluctuations in demand and prices are high, and there is an increasing consumer concern for food safety (Van Der Vorst and Beulens, 2002). Challenges of the chain revolve around the long-time of food processing and high logistics and warehousing costs

(Christopher, 2011) due to the special conditions fresh food requires. So, customers pay more attention to freshness, transparency in the process, and reduced environmental impact (Galli and Brunori, 2013). In 2017, Csiro Futures developed on existing megatrends shaping the agribusiness and food supply chain in Australia initially presented by Hajkowicz and Eady in 2015. Those megatrends are characterized as: "a less predictable planet", "health on the mind", "choosy customers", "one world", and "smarter food chains".

Local Sourcing

The concept of local sourcing generally refers to acquiring goods and services from national or regional suppliers. The definition of local may be subject to various interpretations. However, being Portugal a relatively small country, it may not be controversial to assume that any domestic product is considered local.

This practice offers some advantages when compared with international sourcing- the sourcing from global markets. Despite contributing to the rural development of a country (Van Der Ploeg et al. 2000), it enhances the national economy by distributing profits domestically and creating job opportunities. Local sourcing may represent a short in costs, namely transportation and warehousing ones. Since distance is smaller, there is less need for packaging, processing, and refrigeration than long haul, industrial food (Kneafsey et al., 2013). Among the benefits of local sourcing there is easier monitoring. The proximity between the producer and the buyers allows for more frequent visits and quality control processes.

Regarding consumers, there is a perception that local procurement is more environmentally sustainable (Born and Purcell, 2006). Lehtinen (2012) saw local sourcing as a practice of sustainable food procurement as it is an enabler of local economic growth. This perception of sustainability and the perception of better quality are making consumers shift their food consumption patterns to seeking local food products (Adams and Salois, 2010). In a short food

supply chain (SFSC), customers feel closer to producers and believe that the product and processes' information are transparent (Marsden et al., 2000).

Furthermore, local sourcing may solve some of the hurdles of international sourcing, such as high lead times and inventory levels besides other hidden costs (Handfield, 1994). Wang et al. (2008) found evidence of a reduction in lead time which mitigates the bullwhip effect- a cause of inefficiencies along the entire supply chain.

One of the challenges of international sourcing relies on the fact that working with external suppliers leaves companies exposed to additional risks such as dealing with different cultures and geographic distance (Handley and Benton, 2013). It also requires adaptability to an exclusive set of laws and economic conditions (Trent and Monczka, 2003). This exposure ultimately leads to increased costs of communicating and interacting with suppliers. (Weber et al., 2010).

Despite all the presented benefits, sourcing at the national level can lead to a competitive loss if competitor companies can efficiently exploit globalization opportunities and benefits (Golini and Kalchschmidt, 2009). Restricting to national supply may represent limitations in terms of access to expertise as, by going global, companies have more access to entrepreneurship, innovation, and relationship learning (Hult, 2002). Besides, sourcing locally often implies working with suppliers of reduced dimension, which may translate into inconsistent supply and delivery (Abate-kassa and Peterson, 2011). In economies where agriculture is not a target of investments and natural conditions are not favorable, it may be challenging to heavily rely on local production instead of giving preference to importation. The sum of local sourcing's hurdles can lead to uncompetitive prices, which is why many retailers source from external markets.

Corporate Social Responsibility

The nature of local sourcing and what it represents for a business is compatible with Corporate Social Responsibility (CSR). The concept has evolved throughout the years and has been a target of various initiatives. In 2000, the World Business Council for Sustainable Development defined CSR as the "continuing commitment by businesses to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families and the local community and society at large". This topic has been so relevant for stakeholders and businesses that, in 2011, they ranked it as the top focus of managers in the global retail and consumer goods sector (The Consumer Good Forum, 2011). Supermarket retailers such as Safeway (United States), Ahold (Netherlands), and Delhaize (Belgium) refer to local food procurement on the scope of their corporate social responsibility (Martinez, 2010). It is worth noting that many authors (e.g. Giannarakis et al., 2016) have concluded that CSR positively impacts financial performance.

Supplier Development

Along with CSR, supplier development is a concept that is commonly associated with local producers. Had the hurdles of sourcing locally being described, supplier development is an effective way of tackling them. It has the ability to address social issues (Yawar and Seuring, 2017) and improve supplier capabilities and performance (Krause et al., 2007). Simultaneously, it reduces costs through information sharing, communication, joint problem solving, and risk-sharing (Quayle, 2000). Ultimately, supplier development programs may be in the origin of a competitive advantage (Quayle, 2000).

3. Agricultural Sector in Portugal

In 2016, arable land represented 10.7% of total Portuguese territory (World Bank Data). This percentage has been decreasing over time as a consequence of urbanization. The average size of farms amounts to 14.1 ha (PORDATA), which can be considered a small size. While the

number of individual farmers has been decreasing over time, legal societies have gained more representation. Despite some oscillations, Gross Value Added of agriculture has been rising since 2012, which indicates that the sector is flourishing. Nonetheless, the contribution of the Agriculture sector to the total Gross Domestic Product has stabilized around 2.1% since 2013, being slightly below the average contribution of the European Union (average for 2019 was 2.12%) (World Bank Data).

Overall, agriculture has been a significant concern of the Portuguese state and a target for many investments. From 2015 to 2017, the government supported 11,000 projects and injected more than 850 million euros of public aid in the sector. Consequently, global investment has surpassed 1,300 million euros (Portugal Global,2017).

Agriculture in Portugal has become more attractive not only to national workers and companies but also to international stakeholders. The country has registered a substantial inflow of FDI to agriculture, which has been reflected in an expansion of exports. The main markets are Spain, Brazil, France, Italy, and Angola. In 2019, agricultural exports represented 11% of total exports of goods as a result of the innovation and growth of the past 10 years. However, importations are not slowing down and the food product deficit is still a reality. Portugal is not capable of being self-sufficient in terms of the food supply. One of the reasons for that is the meteorological conditions which are unpredictable and inconsistent over time. Portugal has to rely on its neighboring countries such as Spain, France, Netherlands, and Germany.

Agricultural statistics from 2018 provided by INE (National Institute of Statistics) reports that Portugal could satisfy the national demand for meat by nearly 75%. Regarding vegetables, the production shows more inconsistency over time and thus less capacity to satisfy internal demand. Cultivations of broccoli and pumpkin occupied the most extensive area while cultivation of tomatoes, carrots, and cabbages registered the highest production value in tons.

Regarding fruit, oranges, apples, and pears present the highest volumes of production in tons.

Nut production has been gaining representativeness overtime, especially almonds.

The main takeaways are that from 2013 to 2017, this sector's percentage growth has been superior to the percentage growth of the whole economy. This is mostly due to large investments and restructure and dynamization of the sector. However, although Portugal presents an extensive portfolio of food products, it cannot supply the entire country, and it is quite challenging to draw trends in the production of some goods.

4.Research Questions and Methodology

This descriptive research aims at studying practices of local sourcing within the food retail industry in Portugal. The literature review was useful to gather theoretical knowledge on the topic but also to detect gaps. Materials were mainly sourced from Nova Discovery, ResearchGate, Google Scholar, and ScienceDirect using keywords such as "local sourcing" or "food supply chain". However, relying solely on those sources is not sufficient to conclude the attractiveness of local sourcing for supermarkets and small retailers in Portugal. In order to fully understand if the benefits hold in Portugal despite the strategy or dimension of retailers and suppliers, the following research questions were elaborated to guide the analysis:

- 1. What is the role of local sourcing for retailers' businesses?
- 2. What are the experienced benefits of sourcing locally?
- 3. What is stopping retailers from sourcing heavier from local suppliers?
- 4. How do customers feel about local sourcing?

Additionally, a group of hypotheses was formulated to test some beliefs induced by literature review and conduct a more accurate analysis. They are as follows:

- H1. Local sourcing is a practice of corporate social responsibility.
- H2. Supplier development is crucial to the profitability of local sourcing.
- H3. Domestic products are fresher than imported ones/ last longer on display.

- H4. Domestic products have a higher profit margin.
- H5. Customers are willing to pay a higher price for national products.

Data collection was done through three different surveys and obtained information was mainly qualitative as it allows for flexibility and detail. Both supermarkets and small retailers (grocery stores, mini markets, or fruit shops) were inquired as well as end consumers. A total of 10 supermarket retailers were contacted via phone and email, 2 of which agreed to participate in the survey. One of the retailers contributed with the inputs of two specialists having sent two surveys. In the impossibility of getting other supermarkets to participate, insights were retrieved from their websites to enrich the analysis whenever appropriate.

Survey questions were designed to allow for open answers and to get insights on 1) role of local sourcing in the company; 2) experienced benefits when resourcing to national producers; 3) performance of national suppliers versus international ones; 4) importance of supplier development; and 5) perception of consumer behavior regarding fresh Portuguese products. The total number of questions was 15 (see Table 1 in the Appendix).

Additionally, small retailers were surveyed. Given the distinct dimension and business models of such businesses, the original survey was adapted and questions were reduced to 10 (see Table 2 in the Appendix). This second survey still allowed for open answers and got insights on 1) structure of supply chain, 2) role of local sourcing in the company, 3) obstacles to sourcing locally and motives for sourcing internationally, 4) quality and profit of national versus international, 5) performance of supply, 6) perception of consumer behavior regarding fresh Portuguese products. A total of 19 business owners participated in the survey out of the 55 contacted via mail or social media. Due to the constraints imposed by the ongoing Covid-19 pandemic, it was not possible to physically approach retailers, thus limiting the number of retailers contacted. Except for one, only stores within the Metropolitan Area of Lisbon were inquired in order to obtain unanimous and insightful responses. Data from both surveys were

organized using the thematic analysis method very much recommended when dealing with interviews or open answer surveys. Data were coded to highlight relevant ideas and concepts and those codes were organized into themes that consequently guided the analysis.

As the dissertation aims at highlighting strategic benefits of such practice, namely the surplus of quality perceived and willingness to pay of consumers, a third survey was elaborated to the end consumers to test the said benefits described in the literature review and mentioned in the interviews. The number of respondents amounted to 110, with ages ranging from 18 upwards. The sample size may constitute a limitation to the discussion of results. However, extending the survey's divulgation on other known channels would aggravate the asymmetry in the frequency of responses across age groups. Respondents were contacted via social media or direct approach. A total of seven statements about the supply of fresh national products were presented to respondents to express their degree of agreement using a Likert Scale (see Table 3 in the Appendix). The research method aimed at collecting customer insights on 1) awareness of product origin, 2) price concern, 3) perception of price, 4) preference for national, 5) national economy support, 6) perception of quality, 7) demand for more national supply. The end customer data was analyzed on SPSS through descriptive statistics, the Kruskal Wallis test, and a correlation matrix. To facilitate the analysis, statements gave origin to named variables and the agreement scale was interpreted quantitively (see Table 4 in the Appendix).

5. Results and Analysis

I. Supermarket Survey

Contextualization and Sample Collection

Supermarket retailers deal with complex supplier relationships and logistics. They rely on a great number of suppliers from small independent producers to large distributors to bring a wide variety of products to consumers every day, managing large volumes of stocks. There are established communication channels that allow these retailers to deliver their business

propositions and be recognized by the majority of the population. As each proposition is distinct, supermarkets operating in Portugal have different strategies and, therefore, disparate positions on local sourcing.

The two participants of the survey present unalike strategies. While one of the retailers, retailer A, solely operates in a particular region of the country, relying highly on local sourcing, the second one, retailer B, has a broader area of activity and rests upon a cost strategy.

Results Overview

Role of Local Sourcing and Corporate Social Responsibility

Both retailers consented to the importance of local sourcing and its growing expansion. Retailer A has local sourcing embedded in its strategy as it is significantly focused on the regional level. When asked whether this practice belongs to Corporate Social Responsibility, retailer A has no doubts in including it in its social responsibility actions. However, retailer B does not associate both concepts. A search on the ten approached supermarkets' websites indicated that nine of them mention its national production investments, how reliance on domestic production has been evolving, and relate this practice with Corporate Social Responsibility or Sustainability. Several chains are purchasing more than 80% of fresh products from Portuguese suppliers.

Profit Margin and Buyer-Supplier Relationships

As a part of the survey, retailers were asked whether nationally sourced products have a higher profit margin than imported ones and the short answer is no. While some local products may have a higher margin, others do not. Nonetheless, it should be noted that one of the retailers considered national products fresher which translates into less waste of resources. This saving of waste allows for a general reduction in the cost of sourcing nationally and creates a higher willingness to pay from retailers to suppliers. Another cost reduction refers to transportation and warehousing. Retailers confirmed that the proximity between the producer and the end

customer offers fewer costs. Furthermore, retailer B has acknowledged that regional products represent a more significant saving than domestically sourced goods but not considered regional.

To enrich the comparison between national and imported products, participants were asked about the ease of monitoring domestic and international suppliers. Once again, participants agreed with being easier to monitor national suppliers and control the quality of products. Regarding quality and competitive prices, retailers were asked if international suppliers offer more attractive conditions. While retailer B denied such connection, retailer A provided no concrete answer being non-viable to establish a comparison between the origin of the supplier and conditions offered. However, suppliers' scale, whether they are national or not, positively impacts conditions offered as there is more capability of satisfying demand and reacting to its fluctuations (logistic capacity). Large suppliers are also capable of offering more competitive prices due to scale benefits, as well as they have more resources to spend on sanitary control of products and processes. As a reminder, sourcing locally often implies working with small-scale suppliers that have not yet achieved economies of scale. This influences the answer to the question regarding the profit margin of national products versus international.

Supplier Development

As sourcing from national producers has been a concern of retailers, they were inquired on the benefits experienced from working closely with them whenever that was the case. Retailer B shortly claimed that it was possible to identify cost reductions from supplier development practices while retailer A recognizes benefits but not in terms of costs. Retailer A's regional sourcing-centered strategy incentivizes producers to obtain quality and sustainability certifications to guarantee food safety. The fact that there is collaboration along the supply chain allows for more tailored offers, which ultimately unlocks a competitive advantage on the base of differentiation instead of a cost advantage.

Although there was no consensus on cost reductions emerging from supplier development programs, participants of the survey agreed that by working closely with producers, information sharing, problem-solving, and communication improved, just as proved by author Michael Quayle. Overall, supplier development practices are "essential" and "very positive for the business". They are a continuous process of learning and evolution which for retailer A results in differentiated products and enhanced quality and for retailer B creates value to buyers and suppliers through cost reduction. A visit to the other supermarkets' websites allowed to collect more information on the success of supplier development. It is said to foster growth, innovation, and synergies at the same time it improves quality and food safety and security.

Freshness- Domestic vs. International

Although survey participants often touched on the freshness and quality of national products, they were asked whether national means more freshness. The proximity between the producer and the retailer positively impacts the product's freshness. However, there is a need for efficient logistics and product traceability to detect that difference.

Value of Local Sourcing for End Consumers

Consumers value differently the offer of locally sourced products. Retailer A believes its consumers appreciate those goods and registers higher willingness to pay from some segments. There has been a change in mindset regarding social and environmental aspects that make it worth investing in those practices. Nonetheless, despite the preference that a significant part of consumers show, there is a need for continuous investment in order to achieve more competitive prices and keep high-quality standards. On the other hand, retailer B's consumers are primarily focused on price. The change in mindset mentioned above has not yet been felt on consumer behavior, which creates no additional willingness to pay for nationally sourced products.

II. Small Retailer survey

Contextualization and Sample Collection

The supply chain and logistics of grocery stores and mini-markets are distinct from big retailers'. This type of smaller store does not deal with the same revenue and costs. The volume and variety of products are reduced, which implies little warehousing and a small network of suppliers. Moreover, due to the small business dimension and a lack of a communicated strategy, it is challenging to address social responsibility and supplier development concepts. Nevertheless, small retailers are still exposed to local sourcing's advantages and hurdles and experience close contact with the end customer knowing his preferences and choices.

To be considered eligible for the study, retailers had to meet a few requirements. Besides operating in the Metropolitan Area of Lisbon, only those with any kind of social media or web page updated with pictures showing fresh products were contacted. Pages that had not been active in the previous four months were not considered. Nonetheless, it should be noted that the sample embraces participants with different degrees of online presence measured by the number of followers/likes, post frequency, and engagement. A variety of business propositions characterizes the sample: organic grocery, gourmet grocery, fruit shop, mini-market, and regular grocery store.

Results overview

Supply Chain Network

To better understand the impact of sourcing decisions on upcoming answers, respondents were asked about their supply network. Of the nineteen answers, thirteen said they resource to both producers and distributors, five only buy from producers, and one solely buys from distributors. One of the respondents has a production of fresh goods. A primary aspect affecting the structure of the supply network is proximity. Regional products are more frequently sourced directly from producers as retailers can quickly meet them with no resource to intermediaries.

Hence, distributors have a significant role in providing national products from distant places within the country.

Another factor influencing the choice of supplier is quantity ordered. For retailers working with an online platform, home delivery, and orders, the decision to resource directly to the producer or the distributor is directly influenced by the consumers' preferences at a given time.

Role of Local Sourcing and Corporate Social Responsibility

All respondents characterized the selling of fresh national goods as very important to the business. Seven retailers described it as a "priority" or a "preference". It is worth retaining that smaller independent retailers have always been associated with local production instead of international products. Inputs brought by those retailers allow for the conclusion that, despite internalization tendencies, offering such a portfolio of goods is still a part of their brand image.

While the concept of social responsibility is widely associated with large corporations, any business owner can have social concerns and act on them. One of the respondents confessed that the primary reason for sourcing locally was to help small local producers. Additionally, a retailer claimed that ethical reasons were in the origin of national preference and another admitted that "offering national products was very important to himself".

Obstacles to Local Sourcing

Despite this practice's said importance, local sourcing comes with obstacles and retailers often find reasons to source internationally rather than domestically. While five of them denied any obstacles, scarcity of supply was a recurrent topic. Stores often demand more than what the producer can provide, being one reason for recurring to distributors and imported products. Scarcity is defined as the limited supply of a good with high demand. This mismatch produces consequences such as increases in price, which, in turn, are also an obstacle for sourcing locally. Moreover, retailers claim that the customer demands a wide variety of products, which is often challenging to fulfill with domestic supply.

Additionally, respondents pointed out seasonality as another obstacle. Once again, customers demand a certain quality and variety that are affected by the seasonality of some harvests. Fruits such as orange or chayote have demand for the whole year; however, quality is fluctuating or the product is not available at all. On the same note, adverse weather conditions may also be an obstacle when they compromise the quality of products (ex: cherry). Besides limited supply, there can be issues of storage. Some retailers do not acquire more products due to lack of space in their facilities.

Motives to Source Internationally

The obstacles mentioned above are frequently a motivation to recur to distributors for imported products. The vast majority of managers admitted buying from foreign countries when the product is not available at the national level, proving the national preference they initially claimed. Because offering a wide variety of fresh products is a concern of retailers, they turn to international suppliers to bring exotic fruits. Due to the mentioned scarcity at the national level, retailers many times find better quality and more competitive prices globally, making them shift to those suppliers. Those retailers find competitive prices as goods may come from specialized producers with a comparative advantage.

Profit Margin and Buyer-Supplier Relationships

Despite the price being a recurrent factor brought by respondents to address local sourcing obstacles and motives to source internationally, they were directly asked whether fresh national products have a higher profit margin or not. It is acknowledged that retailers have divergent pricing strategies; nonetheless, some conclusions can be drawn. Out of all participants, eleven concluded that domestic products' profit margin was inferior to international products'. Supply chain theory would say that a shorter supply chain would imply reduced costs. Nonetheless, opinions were divided in what regards sourcing directly from the local producer. While some said that this short chain allows for higher margins, others claimed that the local producer offers

a price just below what the retailer is expected to sell. Conclusively, profit margin is a constant trade-off between the reduced number of intermediaries and small producers' eventual scale problems.

Additionally, business owners were asked if a supplier's dimension is positively correlated with the conditions offered - price offered, quantity supplied, quality, and consistency. Although suppliers were analyzed in terms of size rather than the origin of products supplied, there is the assumption that small suppliers will merely provide national goods. While five respondents confirmed a positive correlation between the scale of supplier and provided conditions, the remaining fourteen denied it. Managers argued that what most influences price is the number of intermediaries rather than the dimension of those. There may be a tendency to associate both ideas as large suppliers have higher recognition and are likely more organized and professional. However, it was often mentioned that small producers and distributors' performance fulfills retailers' expectations and standards.

Regarding quality, it was twice said that large distributors do not have as much quality as smaller ones. As for consistency, respondents did not highlight a correlation between the frequency of suppliers' inconsistencies and their scale. In the first place, the majority confessed that inconsistencies were not a recurrent problem. However, when they happen, it is mainly due to seasonality, as it is the case of cherries and chestnuts.

Participants were also inquired about the evolution of conditions provided by their network of suppliers. Although answers were relatively vague and dispersed, seven respondents evaluated the evolution as "great", "good", or "fair". There was a record of supplier loyalty being the cause of decreasing prices; however, this loyalty was only mentioned once, unlike what was expected. One of those retailers not registering any evolution on conditions offered confessed being continually searching for new suppliers to expand the network. Although expanding the network opens doors to new products and more competitive prices, at the same

time, it can be an obstacle to bargaining power and supplier loyalty.

Freshness- Domestic vs. International

In theory, locally sourced products represent less lead time than those sourced internationally. Hence, retailers were asked if this eventual difference in lead time can be proven on the durability or freshness of products. Similar to other questions, insights were not unanimous and only four respondents could denote a surplus in durability. Answers demonstrated that a product being nationally sourced does not necessarily imply that it is fresher than it would be if sourced from the exterior. What most affects freshness and quality is the number of intermediaries and, consequently, the" number of cold chains". A product sourced directly from the regional supplier will undoubtedly be fresher than any product requiring storage and transportation because this product will most likely be on display the day after it was harvested. Nonetheless, if a national product is not stored or transported efficiently, its quality will not be superior to a product coming from other countries.

Regarding lead time, participants mentioned that, since imported products come mainly from neighboring countries, when transported by airplanes, they have similar lead time to nationally sourced products. Ultimately, this results in similar freshness and quality. Nonetheless, if fresh goods come from long distances and by boat, the quality will be affected despite the cost reduction. Products that are meant to be exported or travel long distances are often pre harvested, which means that producers cannot wait until they are ripe. This affects flavor and leads store managers to believe that Portuguese products taste better. In fact, it was four times said that national products have superior flavor.

Value of Local Sourcing for End Consumers

It was acknowledged that consumers value products from Portugal, are happy to buy them, and expect that offering from retailers. Nonetheless, it was often mentioned that they expect to find the best quality at the lowest price. As previously seen, it is not always possible to meet

such requirements. There was a consensus in what regards preference for nationality. Consumers do pay attention to where the good comes from, and although it was confirmed that some clients are less price-sensitive, some others are willing to forgo their preference for national and prioritize cost.

III. End Customer Survey

Survey Structure and Sample Collection

Even though supermarkets and grocery stores provided their insights regarding consumer behavior, the end customer was inquired to reduce the likelihood of misknowledge.

The survey was elaborated on Qualtrics website and distributed on social media. The respondents' portfolio ranged from close contacts to strangers thanks to disclosure on Facebook survey exchange groups and online divulgation of the same by close contacts. Participants were asked to express their agreement level with a set of statements on a 5-point Likert scale. Some specialists argue that using a 7-point Likert scale leads to more accurate conclusions; however, a 5-point Likert scale reduces respondents' frustration level and increases response rate and quality (Babakus and Mangold 1992). The survey was solely designed in Portuguese to obtain a more accurate sample. Only those of legal age were invited due to legal reasons and because it is only relevant to collect insights of actual grocery shoppers. This being said, respondents were segmented by the following age intervals: [18,24]; [25,34]; [35,44]; [45, 54]; [55+ [. District of residence was not asked as it was not considered a relevant variable of segmentation. Out of the 124 individuals who opened the survey, 110 reached the end of it, so the completion rate was about 89%. The relative frequency of ages is as shown is shown in Table 5.

Results Overview

Descriptive Statistics

In general, respondents highly agreed with the statements presented. Nonetheless, some statements generated more controversy or uncertainty than others. Full descriptive statistics

and results can be found on Table 6 and 7 and Graphic 1 in the Appendix.

The first declaration attempted to test customers' awareness to a product's country or region of origin when shopping for fresh products and 75% confessed their awareness. The remaining 25% either do not have an opinion on the subject or usually do not notice where they come from. This was one of the topics showing the highest standard deviation. However, the statement with the highest variance was the second one, which aimed at evaluating if price is the central concern of consumers when buying fresh products. This time, 31% of respondents did not agree with the affirmation, while 59% did, implying that price concern is not the same for all customers.

The third statement made respondents reflect upon the price of fresh national products versus imported fresh products. About 21% of respondents could not decide on the topic, being this affirmation the one with the highest number of "Neither Agree nor Disagree" answers. This may be explained by the large proportion of consumers who are not aware of products' origin or by the wide variety of the portfolio of fresh products. Regardless, 61% of answers revealed a partial or full agreement with the statement, while 18% partially or fully believe that fresh Portuguese products are cheaper than imported ones. The fourth affirmation exposed surveyees to the preference for national products over foreign ones and 81% of participants confirmed their preference, whereas 6% did not agree. On the fifth statement, approximately 72% of participants agreed they are willing to pay an additional price for a national product to support national production and economy. However, unlike statements #1, 4, 6,7, the "Partially Agree" option represents a higher record of responses than "Totally Agree" which may indicate that consumers are only willing to pay that additional price to a certain extent.

Regarding the perception of the quality of national products against imported products (statement #6), just as it happened in statement #3 about the perception of price of both, consumers demonstrated high uncertainty with 23% of "Neither Agree nor Disagree" answers.

Nonetheless, only 7% did not agree that domestic products have superior quality. Lastly, the seventh statement inquired respondents on their wish to be presented with a higher supply of fresh products available for purchasing, to which 95% of respondents agreed, and 5% were indifferent. There are a few reasons why customers would look for a higher supply of national products, namely more competitive prices and better chances of supporting the economy.

Kruskal Wallis Test and Correlation Matrix

Age is one of the most important demographic factors affecting consumer behavior (Kumar, 2014). As consumers age, the process of evaluating, acquiring, using, or disposing goods and services modifies (Kumar, 2014). Hence, it was possible to identify different behaviors towards local products across age groups.

In the impossibility of employing the one-way ANOVA, the Kruskal Wallis test was performed (see Table 8 in the Appendix). This is a non-parametric test that allows to identify significant differences between groups. Under a confidence level of 95%, the test revealed differences in Variables Origin, Price Concern, Preference, Quality and Offer. The correlation matrix enabled further conclusions (see Table 9 in the Appendix). A correlation of 0.408 may indicate that as consumers get older, there is a general tendency to care heavier about where fresh products come from. Additionally, although the test indicated unlike concern for price across age groups, the correlation between both is widely considered weak (-0.267). Nonetheless, respondents from groups [45, 54] and 55+ disagreed the most with the price being their top concern. In fact, 56% of individuals between 45 and 54 years old did not consider price as their top concern. The correlation between Age and Preference, Quality and Offer has shown positive but equally weak, being 0.256, 0.211, and 0.314, correspondingly. However, respondents of age above 45 scored higher on willingness to pay for national products and perceive a better quality of the same. This may indicate that, while Generation Z (born between 1995 and 2012) tends to prioritize sustainability issues and have a higher willingness to pay for

sustainable goods (First Insight, 2020); elders have more experience with grocery shopping being that a valid reason for prioritizing national production. The correlation matrix showed that those preferring national products are more likely to be aware of their origin, perceiving better quality, have a higher willingness to pay, and desire a more robust offer (correlations between 0.45 and 0.52). There is also evidence of a positive correlation between higher willingness to pay and the perception of better quality (0.472).

6. Discussion

As previously mentioned, through a set of research questions, the dissertation aims to shed light on the attractiveness of local sourcing for both large and small retailers operating in Portugal. The results indicate that local sourcing is, in fact, a recurrent topic and a growing concern of retailers. Thus, it performs an essential role in the strategy and operations of those businesses. For many, resourcing to national producers is a priority but guaranteeing such products is a part of a brand image that has been conserved for a long time. For larger retailers with an established and communicated strategy, local sourcing allows for a differentiated range of goods. The surveys' results are in line with the literature review in what regards consumer behavior. Consumers are getting more environmentally and socially conscious and consequently more prone to get national goods. Yet, only for some retailers, this change in mindset is relevant enough to invest in new products and local suppliers or develop relationships with existing ones.

All businesses could highlight benefits of sourcing locally; however, large retailers are more likely to exploit those. Goods sourced directly from the producer are undoubtfully fresher than goods coming from foreign markets. Products that come from distant countries and are destined for a long lead time have their quality sacrificed, whereas most national goods do not need to be harvested ahead of time and get to preserve flavor. However, when focusing on national products that are supplied by distributors or come from longer distances, small retailers do not

readily recognize a surplus of quality when compared with international goods. In contrast, large retailers can still infer higher freshness on those products. This happens because large retailers have a denser network of suppliers and more resources to optimize logistics and reduce lead time. Hence, hypothesis 3 relating to the superior freshness of national goods is rejected.

Reduction in transportation and warehousing costs when sourcing locally is mainly felt by supermarkets. Small retailers experience savings when sourcing from producers, but distributors bring both national and imported products. Another benefit refers to easier monitoring and controlling of suppliers and products' quality. This one mainly refers to large retailers since this kind of capability usually does not apply to grocery stores and their firm reliance on distributors. Lastly, sourcing nationally gives all retailers the chance to support local farmers and contribute to the regional economy's development.

Vendors often experience some hurdles when sticking with the domestic market. It is common to find uncompetitive purchasing prices, motivating small-sized retailers or retailers pursuing a cost strategy to seek suppliers at the international level. However, the larger the buyer, the larger the bargaining power to negotiate prices. Overall, is not possible to conclude that domestic products have a higher product margin, having to reject hypothesis 4. In fact, results have pointed out to weaknesses in the Portuguese agricultural competitiveness. Moreover, scarcity of supply is a common issue in Portugal many times originated by the seasonality of products and felt on all retailers' stocks. For businesses that want to offer the consumer a wide range of products and meet their demands, it is inevitable to access external markets in order to acquire goods that are hardly or not produced in Portugal.

Results have shown that customers care about the origin of a product and there is a general tendency to be more aware of that as they grow older. Nevertheless, fresh Portuguese products are often perceived as more expensive than imported ones. Those who are willing to pay an extra price either: belong to a segment characterized by more economic power; are

environmentally and socially conscious; or pay it due to a perception of better quality. As a consequence of the lack of quantification of willingness to pay and disperse answers from retailers, it is not possible to reject hypothesis 5 related to willingness to pay.

Most retailers demonstrated their sense of responsibility towards local sourcing. Supermarkets communicate it directly to consumers, whereas for small retailers, local sourcing is a part of their identity, but there is an embedded sense of supporting the regional economy, mostly when they work directly with producers. Hence, this practice can be fit within Corporate Social Responsibility and hypothesis 1 should be accepted.

Regarding supplier development, it may not guarantee a direct reduction in product costs. In supermarkets developing a cost leadership strategy, they may invest resources into getting a product at the most affordable price. On the other hand, if retailers opt for a differentiation strategy, supplier development initiatives might focus on improving quality, sustainability, or innovation of products and processes, which, in turn, creates willingness to pay. Thus, hypothesis 2 cannot be rejected.

7.Limitations

It should be acknowledged that although the supermarket retailers provided distinct perspectives on several topics and enabled a comprehensive analysis of local sourcing, the sample is still considered small and a limitation for the analysis. Having done surveys instead of interviews further limited the degree of detail to which participants answered questions and may have affected their understanding of the same.

8. Conclusions

This research aspired to analyze the value of local sourcing by testing if its benefits and implications are equally felt. Inputs brought by various retailers have shown that the attractiveness of purchasing at the national level is not the same for every business. Strategy and dimension do affect the evaluation made on this practice.

At the same time supply chains are becoming more and more globalized, countries like Portugal are joining efforts to boost national agriculture and retailers aim to represent national producers. Despite this common desire to elevate local sourcing and contribute to economic development, some factors lead both retailers and consumers to look for imported products at times. Although national products represent a saving in transportation costs, this cost reduction is often not sufficient to offset the uncompetitive prices faced by buyers. Adding to that, it is common not to find enough supply to fulfill both retailers and consumers' demand, which, besides restricting the offer of national goods, aggravates market prices. This sequence of events has more severe repercussions on retailers that either strive to offer the best prices or do not enjoy a comfortable position to negotiate those with upper suppliers.

Limitations aside, sourcing directly from the national producer allows for enhanced quality and flavor; however, when intermediaries are required, large retailers have better chances of employing resources to reduce lead time and track quality. One effective way to increase the attractiveness of local sourcing is through supplier development. It allows strengthening a differentiation strategy while it may also bring cost reductions highly appreciated by those pursuing a cost strategy. This process, however, is only provided by large retailers.

Overall, retailers recognize the practice's potential and do not intend to divest on it. Despite the unequal attractiveness in terms of profitability, consumers expect a variety of fresh national goods and supporting such offering is essential to regional development. The attractiveness's improvement depends as much on the retailers and consumers as on the producers themselves and the government.

To better understand the potential of local sourcing and the root of its obstacles, future research, besides addressing the study's limitations, could collect inputs from other supply chain elements such as producers and distributors.

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10. Appendix

Table 1: Questions – Supermarket Survey

1. Has the expansion of a portfolio of fresh national products been part of this company's strategy?
2. Does the company see local sourcing as a corporate social responsibility practice?
3. Has there been a change in the prices offered by suppliers and in the consistency of the supply of national products?
4. How do you evaluate the ease of monitoring domestic suppliers compared to international suppliers?
5. Which products have lower transport and storage costs: domestic or imported?
6. Is there a difference in the freshness of national and imported products? In other words, do Portuguese products last longer on display?
7. In general, do fresh national products have a higher profit margin than imported ones?
8. Would the company depend more on domestic suppliers if the offer was more consistent/sufficient?
9. In Portugal, the bigger the supplier, the better the conditions offered?
10. Do international suppliers offer better supply conditions than national ones?
11. Was the company able to detect any cost savings from supplier development initiatives? (National suppliers)
12. Regarding the relationship with suppliers, can it be said that information sharing, communication and problem-solving skills have improved as a result of supplier development practices?
13. How do you assess the company's overall supplier development impact on the evolution of local sourcing?
14. Regarding consumers, do they show a preference for national products? Would they be willing to pay a premium price?
15. Some consumer groups have become more environmentally conscious and therefore less sensitive to price. Would you say that this change in consumer behavior is a considerable reason to invest in local sourcing?

Table 2: Questions – Small Retailer Survey

1. How does the supply chain for fresh produce work? Do you buy directly from the producer or do you use distributors?
2. What is your position in relation to the sale of fresh regional/national products? In other words, what is the importance of selling these products to your business?
3. Is there anything stopping you from ordering more fresh products of regional/national origin?
4. What drives you to source fresh imported products?
5. Do you think there is a difference in the freshness of regional/national and imported products? In other words, can it be said that Portuguese products last longer on display?
6. In general, do fresh domestic products have a higher or lower profit margin than imported fresh ones?
7. How frequent are inconsistencies in the delivery of fresh national products by your suppliers? That is, not being delivered the ordered quantity.
8. How do you evaluate the evolution of prices offered by your suppliers and the consistency of supply?
9. In Portugal, the bigger the supplier, the better the conditions offered?
10. In relation to customers, do they show a preference for national products? Are they willing to pay a premium price?

Table 3: Statements – End Costumer Survey

When buying fresh products, I pay attention to their origin.
 When buying fresh products, my main concern is the price
 In general, I have the perception that fresh national products are more expensive than imported ones.
 I prefer to buy national products rather than imported ones.
 I am willing to pay more for a fresh national product in order to contribute to the prosperity of national production
 Fresh national products have a higher quality than imported ones.

Tables 4: Variable Naming and Numerical Range – End consumer Survey

7. I wish there were a greater supply of fresh national products.

Statements	Variable Name	Agreement Scale	Ordinal correspondence
1.	Origin	Strongly Disagree	1
2.	Price Concern	Partially Disagree	2
3.	Cost	Neither Agree nor Disagree	3
4.	Preference	Partially Agree	4
5.	Support	Strongly Agree	5
6.	Quality		
7.	Offer		

Table 5: Age Frequency – End Consumer Survey

Age Interval	Absolute Frequency	Relative Frequency
18-24	42	0.38
25-34	8	0.07
35-44	10	0.09
45-54	34	0.31
55+	16	0.15
Total	110	1

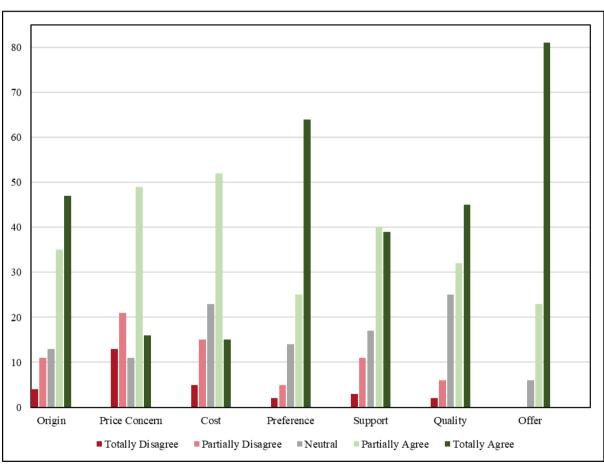
Table 6: Descriptive Statistics – End Consumer Survey

Variables	N	Minimum	Maximum	Median	Mean	Std.Deviation
Age	110	1	5	3	2.76	1.568
Origin	110	1	5	4	4	1.133
Price Concern	110	1	5	4	3.31	1.269
Cost	110	1	5	4	3.55	1.037
Preference	110	1	5	5	4.31	0.984
Support	110	1	5	4	3.92	1.076
Quality	110	1	5	4	4.02	1.014
Offer	110	3	5	5	4.68	0.574

Table 7: Results – End Consumer Survey

	Totally Disagree	Partially Disagree	Neutral	Partially Agree	Totally Agree	Total
Origin	4	11	13	35	47	110
Price Concern	13	21	11	49	16	110
Cost	5	15	23	52	15	110
Preference	2	5	14	25	64	110
Support	3	11	17	40	39	110
Quality	2	6	25	32	45	110
Offer	0	0	6	23	81	110

Graphic 1: Results- End Consumer Survey



Clustered column graph representing absolute frequency of results.

Table 8: Kruskal-Wallis Test ^a – End Consumer Survey

	Origin	Price Concern	Cost	Preference	Support	Quality	Offer
Kruskal-Wallis	18.389	15.030	4.325	13.449	8.280	10.325	17.307
df	4	4	4	4	4	4	4
Asymp. Sig.	0.001	0.005	0.364	0.009	0.082	0.035	0.002

a. Grouping Variable: Age

Table 9: Inter-Item Correlation Matrix – End Consumer Survey

	0	1	2	3	4	5	6	7
0.Age	-							
1.Origin	0.408	-						
2.Price Concern	-0.267	-0.204	-					
3.Cost	0.074	-0.08	0.275	-				
4.Preference	0.256	0.510	-0.276	0.031	-			
5.Support	0.211	0.323	-0.250	0.065	0.518	-		
6.Quality	0.239	0.391	-0.154	0.034	0.510	0.472	-	
7.Offer	0.314	0.254	-0.078	0.063	0.452	0.329	0.405	-