ABSTRACT

**Purpose:** Geographical indications (GIs) are considered a type of brand that is shared by companies in the same sector in order to highlight the origin of a product and have its quality recognized. They have been widely used in the wine sector. This study aims to verify whether geographical indications can be considered an internal resource that generates competitive advantage for the Brazilian wine sector. Furthermore, it also aims to: i) understand the purpose of creating a geographical indication; ii) understand the process of creating the geographical indication and the procedure for authorizing its use; iii) understand what are the unique intangible results obtained by a geographical indication; iv) check the vision of the future concerning the geographical indication.

**Design/methodology/approach:** It was conducted in-depth interviews with government agencies, associations, and winegrowers in Rio Grande do Sul/Brazil.

**Findings:** Therefore, GI projects can be resources that are difficult to copy or replace, building knowledge, identifying terroirs, and redefining production practices.

**Originality/value:** It can lead to the achievement of sustainable competitive advantage with increased exports and differentiated products in the market.

**Keywords:** Shared Brands, Geographical Indication, Competitive Advantage, Sustainable Competitive Advantage, Resource-based View.
RESUMO

Objetivo: As indicações geográficas (IGs) são consideradas um tipo de marca que é compartilhada por empresas de um mesmo setor com a finalidade de evidenciar a origem de determinado produto e para ter sua qualidade reconhecida. Elas têm sido amplamente utilizadas no setor de vinhos. O presente estudo busca verificar se as indicações geográficas podem ser consideradas um recurso interno que gera vantagem competitiva para o setor vitivinícola brasileiro. Ademais, visa também: i) compreender o objetivo da criação de uma indicação geográfica; ii) entender como ocorre o processo de criação da indicação geográfica e o procedimento para autorização do seu uso; e iii) compreender quais são os resultados intangíveis únicos obtidos por uma indicação geográfica; iv) verificar como está a visão de futuro em relação a indicação geográfica.


Achados: Conclui-se que os projetos de IG podem ser vistos como recursos difíceis de serem copiados ou substituídos e que constroem conhecimentos, identificando terroirs e redefinindo práticas produtivas.

Originalidade/valor: Isto pode levar ao alcance de vantagem competitiva sustentável com aumento das exportações e produtos diferenciados a serem oferecidos no mercado.


1 INTRODUCTION

Marketing alliances create values for the firms involved (Swaminathan & Moortman, 2009). One of the possible types of alliances is the creation of shared brands (Agostini & Nossella, 2017). This type of brand acts as a unique identity for two or more firms and brand management is governed by an independent entity (Tregear & Gorton, 2009).

Geographical indications (GIs) are considered a type of brand shared between companies in the same sector. They often use them to evidence the origin of a particular product (Aichner, 2014) that is recognized for its quality (Castro & Giraldi, 2015). They have been widely used in the wine sector because the addition of information about the region where the wines come from often increases consumer confidence in the quality of the product (Bruwer & Johnson, 2010). Some examples of geographical indications of the wine sector are the brands Champagne (Charter & Spielmann, 2014), Rioja and La Mancha (Aranda & Gómez; Molina, 2015), and Vale dos Vinhedos (Nierdele, 2011).

The advantages of having a geographical indication are that it can add value to the product, allowing the achievement of a competitive differential for the territory compared to competitors, in addition to enabling the production organization, promoting tourism in the region, and favoring the development of rural areas (SEBRAE & INPI, 2014). Competitive advantage can be developed from a set of resources and skills that cannot be negotiated, imitated, or replaced by competitors (Von Krogh & Ross, 1995). Brands are an intangible resource that can be a source of competitive advantage for firms (Maritan & Peteraf, 2011).

Iversen and Hem (2008) state that the addition of provenance associations in brands of products or services from a given place can generate more strength than other types of brand associations. Thus, it is possible that the creation of shared brands or, more specifically, the geographical indication for a given region, is considered a type of internal resource that generates competitive advantage for firms in the sector that use them. Castro and Giraldi (2018) report that the use of
shared brands can bring competitive advantage to the Brazilian wine sector. However, no studies were found to verify how the use of geographical indications in the wine sector has occurred and to verify whether they are really providing competitive advantage for wineries, as expected. Thus, the present study aims to answer this research question: has the use of geographical indications generated competitive advantage for Brazilian wineries?

This study aims to verify whether geographical indications have generated competitive advantage for the Brazilian wine sector. This sector was chosen because it has the largest number of GIs registered with the Brazilian Institute of Industrial Property (INPI). Besides, it was the pioneer sector, obtaining the first Brazilian GI registered in 2002, in Vale dos Vinhedos/RS. Furthermore, it also has some specific objectives: i) understand the purpose of creating a geographical indication; ii) understand the process of creating the geographical indication and the procedure for authorizing its use; iii) understand what are the unique intangible results obtained by a geographical indication; iv) check the vision of the future concerning the geographical indication.

The study is relevant as it brings practical and theoretical contributions. Regarding practical contributions, the study shows good practices in managing shared brands that can be applied in other national and international sectors that have the intention of developing geographical indications. Regarding the theoretical contribution, it occurs by filling the indicated research gap, presenting the stakeholders’ view of geographical indications about their real contribution to the competitive advantage of wineries.

2 BRAND AS AN INTERNAL RESOURCE FOR COMPETITIVE ADVANTAGE

In general, all firms in a given sector have similar access to information about the competitive environment. However, not all of them have equal access to controlling the organization’s internal information processes. Whoever better manages the acquisition and accumulation of internal resources can obtain competitive advantages over competitors (Maritan & Peteraf, 2011).

Thus, competitive advantage results from the implementation of the strategy outlined by the company, and it is not implemented simultaneously by current and potential competitors (Von Krogh & Roos, 1995). This competitive advantage becomes sustainable when the transfer and use of resources within the company are difficult to access or replicate by competitors (Porter, 1996).

Thus, a competitive advantage can be maintained through the implementation of a resource-based view (Barney, 1991; Grant, 1991; Peteraf, 1993). The conceptual discussion regarding this theme began in the 1980s with the studies of Wernerfelt (1984) and Barney (1991). The works of these authors start from the “inside out” view, understanding that the organization's internal resources can lead to a condition of sustained competitive advantage.

Thus, maintaining a competitive advantage is seen as building barriers against the imitation of unique skills and resources. Furthermore, the immobility of resources prevents other firms from acquiring or imitating resources, making them unique in the market, establishing one or more broad and invulnerable bases (Wan et al., 2011).

Therefore, for a given firm to guarantee a winning strategic position, it will need to develop a set of resources and skills that cannot be negotiated, imitated or replaced, as these would be the only possibilities existing to its competitors (Wernerfelt, 1984; Von Krogh, Roos, 1995).

Regarding obtaining resources, Maritan and Peteraf (2011), based on the works of Barney (1986) and Dierickx and Cool (1989), state that a company must acquire tangible and marketable resources (buying) and also must build intangible or non-tradable resources (building).
Thereby, Maritan and Peteraf (2011) join the contributions of the works of Barney (1986) and Dierickx and Cool (1989). The two contributions together are valuable in demarcating a promising territory for future research, generating new insights for the creation of heterogeneous resources, and the leverage of these resources in the market for the creation of value (Molloy et al., 2011; Sirmon et al., 2011). Maritan and Peteraf (2011) consider that not only tangible resources are sources of competitive advantages, but they are also intangible and non-marketable. Brands are considered intangible resources built by companies. They represent products (Xie & Boggs, 2006); organizations (Urde & Greyser, 2016); countries (Ruzzier & Chernatony, 2013); cities (Warren & Dinnie, 2017), and also regions (Castro & Giraldi, 2018). Brands that represent regions have been developed through marketing alliances between companies that come from the same place. Iversen and Hem (2008) state that the addition of provenance associations in brands of products or services from a place may have more strength than other types of brand associations. Thus, brands created to represent geographic regions can be considered an intangible internal resource and a source for achieving competitive advantage. The next topic addresses the issue of geographical indications, one of the possible types of shared brands for representing places.

2.1 Geographical Indications

Marketing alliances can create values for the companies involved (Swaminathan & Moorman, 2009), help them access new markets (Veilleux, Haskell & Pons, 2012), and favor the internationalization process (Veilleux, Haskell & Pons, 2012). Agostini and Nosella (2017) state that one of the possible types of interorganizational relationships in marketing is the creation of shared brands. Shared brands act as a unique identity for two or more companies and their management is governed by an independent entity (Tregear & Gorton, 2009). One of the possible types of shared brands is the geographical indication. Aichner (2014) reports that companies use geographical indications as a strategy to highlight the origin of the product. Although there are some discrepancies between countries on specifications for their creation and use, in the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), it was established that Geographical Indications have the purpose of indicating a good as originating from a territory, a region or a locality.

Some countries already have several records of geographical indications. Besides, they also use it as a way of linking quality to the origin of their products. According to Aichner (2014), Italy, France, and Spain are the three countries that most have this type of registration. Several geographical indications in the world have been successful in their construction. One example is the case of the brand Café de Colombia; the companies that use it are part of the authorized geographical region and maintain production techniques that are controlled at all times (Barjolle, Quiñones-Ruiz, Bagal & Comoé; 2017). Another example of using geographical indication is the brand Champagne, which represents a specific wine production region in northern France. This brand is formed by five thousand small producers and, in addition to these, it also represents some larger companies such as Moët et Chandon, Veuve Clicquot, and Pommery (Charters & Spielmann, 2014).

The creation of geographical indications has been widely used in the wine sector (Ruiz, Esper & Rubio, 2016). According to Bruwer and Johnson (2010), the reason for its use may be because the addition of information about the wine-producing region often increases consumer confidence in the quality of the product. Morrison and Rabellotti (2017) claim that recently there is a significant increase in the distribution of wines in the world and also an increase of inexperienced consumers. Pomarici (2016) reports that there was also an increase in the market share of wine sales in the United States, Australia, Chile, South Africa, and New Zealand. Additionally, new entrants began to gain space in the
international market, such as the case of the “Vale dos Vinhedos” region in southern Brazil (Kohls et al., 2016). “Vale dos Vinhedos” is the most traditional and renowned wine-growing area in Brazil due to its historical trajectory linked to wine production and the recent construction of a new “identity brand” that seeks to express its excellence in the production of fine wines (Nierdele, 2011). The Brazilian context of geographical indications will be presented in more detail in the next topic, which emphasizes the specifications of the wine sector in geographical indications.

2.1.1 Geographical Indications in the Brazilian wine sector

Concerning the different existing rules for the classification of shared brands for the representation of places, it is important to understand how the structuring of this type of brand was defined in the Brazilian context. Thus, in Brazil, the classification occurs as follows: (i) sectorial brands; (ii) collective brands; (iii) geographical indications (Castro & Giraldi, 2018).

Sectorial brands are part of the broader scope. They are developed from projects created with the intention of international representation of a specific sector of the country, aiming at increasing its export (Lourenção et al., 2019). Any company that is within the sector can be part of it. It does not need to prove a certain mode of production and/or quality of its products and it does not need to be registered (Lourenção & Giraldi, 2017; Castro, Giraldi & Oliveira, 2018).

Collective brands are granted to a group of organizations that sell the same product and want to link quality to member companies. Products do not have to be produced in a defined geographical region, and their registrations do not necessarily need to have a geographical name, as occurs in geographical indications (Castro & Giraldi, 2018).

Finally, geographical indications are more restricted and constitute an instrument to value territorially distinguished goods, that is, they are products from a certain region that are recognized for their quality. To obtain the geographical indication, it is necessary the study and geographical delimitation granted by the IBGE. It needs a regulatory council and it does not need to be renewed (Castro & Giraldi, 2018).

Geographical indications can be granted at two levels: indication of origin (IO) and/or denomination of origin (DO). In the denomination of origin, the characteristics of the geographical environment add a differential to the product. The quality is influenced by the characteristics of that place, including natural factors such as climate, soil and humans, such as, the competence to develop the product. A food or agricultural product recognized as a denomination of origin must be produced, elaborated, processed or industrialized in its territory of origin (Barbosa, Peralta & Fernandes, 2013; SEBRAE & INPI, 2014).

The indication of origin is less restrictive than the denomination of origin. It values the productive tradition and the public recognition of the product of a given region. For IO, the reputation and notoriety of the product are analyzed. In addition, part of the raw material can be produced elsewhere outside the geographic region, which does not happen in DO. However, it is encouraged that the production of raw material is local or in nearby regions to foster the production chain and local development (SEBRAE & INPI, 2011; Barbosa, Relado & Camara, 2014).

Indications of provenance are widely used in the wine sector (Bruwer & Johnson, 2010). Menival and Charters (2013) report that they are important in this sector because wines are usually associated with the characteristics of certain regions and, therefore, it is not possible to separate them from the regional denomination since they bring value to the consumer. In recent years, Brazil has won more than three thousand medals in contests and world events such as France, Spain, Italy, Greece, United Kingdom, Belgium, Canada, USA, among others (Farina & Roloff, 2015; Copello, 2015). Thus, the provenance regions of Brazilian wines must also be used to associate them with the quality of production.
An example is the Vale dos Vinhedos region, one of the first areas of Serra Gaúcha to receive Italian immigrants, which started to gain space in the international segment, being considered one of the new entrants for the competitiveness of the wine sector (Kohls et al., 2016). This region is the most traditional and renowned wine-growing area in the country due to its historical trajectory linked to wine production and the recent construction of a new “identity brand” that seeks to express its excellence in the production of fine wines (Nierdelle, 2011).

Thus, the development of geographical indications for wine regions can contribute even more to the dissemination of quality of Brazilian wines abroad. Currently, the wine sector has six geographical indications registered with the INPI, namely: Vale dos Vinhedos, Pinto Bandeira, Vale do uva de Goethe, Altos Montes, Monte Belo, and Farroupilha. The logos of the indications of origin in the wine sector are shown in Figure 1.

Figure 1 - Logo of indications of origin in the wine sector

![Figure 1](image1)

Source: adapted from INPI, 2015.

In 2012, the wine from Vale dos Vinhedos was also registered as a denomination of origin. The Vale dos Vinhedos’ denomination of origin logo is shown in Figure 2.

Figure 2 – Vale dos Vinhedos’ denomination of origin logo

![Figure 2](image2)

Source: adapted from INPI, 2014.
3 METHOD

The research was qualitative and exploratory to increase the understanding of the problem, providing greater familiarity with the theme to make it more explicit (Cooper & Schindler, 2003; Sampieri, 2006). As for technical procedures, the data collection was approached through bibliographic and documentary research, direct observation, and in-depth interviews, with a survey of documents such as reports and data on the sector to support the research (ANDRADE, 2004).

Thus, the data collection was carried out in person at the structure studied, visiting associations and wineries, with direct observation of the context in terms of facilities, operation, management methods, receiving tourists, marketing of products, layout, exhibition of products, tasting, production process, and storage. In addition to the content of the conversations, the researchers paid attention to the dialogue process experienced in each interview, including rhetoric, argumentative contradictions used in the conversation, such as justifications, change of opinion, among other aspects, as seen in the work of Meneghel et al. (2011).

It was also conducted interviews with Brazilian government agencies and associations such as SEBRAE, MAPA, INPI, Apex-Brasil represented by IBRAVIN and EMBRAPA UVA e VINHO, APROVALE (Associação dos Produtores de Vinhos Finos do Vale dos Vinhedos), ASPROVINHO (Associação dos Produtores de Vinho de Pinto Bandeira), APROBELO (Associação dos Vitivinicultores de Montebelo do Sul), APROMONTE (Associação de Produtores dos Vinhos dos Altos Montes) and AFAVIN (Associação Farroupilhaense de Produtores de Vinhos, Espumantes, Sucos e Derivados), CPEG, AVIGA (Associação dos Vinicultores de Garibaldi), and SINDIVINHORS (Sindicato da Indústria do vinho, do mosto de uva, dos vinagres e bebidas derivados da uva e do vinho do estado do Rio Grande do Sul), and Secretaria of Tourism of the Municipality of Garibaldi.

Finally, it was interviewed the managers of the wineries, with 18 interviews in 15 wineries, namely: Don Laurindo, Lidio Carraro, Miolo, Peculiare, Pizzato, Cooperativa Aurora, Valmarino, Faé, Fantin, Mioranza, Batistello, Cooperativa Garibaldi, Milantino, Casa Pedrucci, and Vaccaro. The interviews were conducted in May 2015 and the reports lasted an average of 40 minutes.

For data analysis, it was used the coding of the subjects interviewed, using the following standard terminology: “O” for Government Agencies, “A” for Associations, and “V” to represent winery managers, followed by the numbering in the order in which the interviews were conducted. The interviews were transcribed and analyzed according to the content analysis method proposed by Bardin (2011).

Categorization is used to provide a simplified representation of raw data. Among the different possibilities of categorization, the investigation of themes or thematic analysis consists of discovering the “cores of meaning” that may have meaning for the proposed objective, and it is quick and effective in the condition of being applied to direct and simple speeches. The analyst can carry out a classical content analysis with a categorical framework, privileging the frequency of the themes with all interviews together (Bardin, 2011). The categories analyzed are presented in Table 1.

<table>
<thead>
<tr>
<th>Analysis categories</th>
<th>Guiding questions</th>
<th>Theoretical foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objectives of GIs</td>
<td>What is the aim of the geographic indication creation?</td>
<td>Bruwen and Johnson (2010), Florek and Conejo (2007), Hakala and Lemmettyinen (2011)</td>
</tr>
<tr>
<td>GI creation process</td>
<td>How is the creation process of a geographic indication in the wine sector?</td>
<td>Nierdele (2009), SEBRAE and INPI (2014), Barbosa and Regalado (2013)</td>
</tr>
<tr>
<td>Procedure for authorizing the use of GI</td>
<td>How is the procedure for authorizing the use of a geographic indication to a given wine?</td>
<td>SEBRAE and INPI (2011)</td>
</tr>
</tbody>
</table>

Table 1 – Analysis categories and their relationship with the guiding questions and theoretical foundation.
4 RESULTS

The analysis of the interviews enabled us to understand that the use of geographical indications as an internal resource provides competitive advantages for wineries in the opinion of government agencies, associations, and winery managers. For this reason, it is necessary to understand the purpose of geographical indication creation, as well as its creation process, the procedure for obtaining authorization to use GIs, the unique intangible results obtained, and, finally, the vision of the future.

4.1 Objectives of GIs

Regarding the objectives that existed for the GI creation, one of them was to internalize the geographical indication as an industrial property asset that could improve the organization, the quality of the products, and consolidate the sector with the Brazilian market, increasing international competitive capacity (O4).

The status of GI not only represents quality but also discloses the brand worldwide. With the advent of GI, the production and competitiveness of fine wines have been improved and new market opportunities and product differentiation emerged by investing in fine wines, in addition to demijohn wines (A3, A6).

This result corroborates with the work of Florek and Conejo (2007), Bruwen and Johnson (2010), Zamparini, Luratti and Illia (2010), Kakuta et al. (2006), Sharp and Smith (2007), Rubini, Motta and Di Tommaso (2013), Hakala, Lemmetyinen (2011) and Herstein (2011) who show that wine producers use alternative means for the “label of origin”, as in the example of the Chianti Classico Consortium in Italy, and the case of the Consortium of Champagne Growers in France and California to express the identity of the producing region. In the Brazilian case, there are distinct places with a vocation mainly for the production of Merlot-type grapes and sparkling wines such as Chardonnay, Riesling Italico, and Pinot Noir.

After understanding what are the objectives and the unique intangible results that can be obtained from the creation of a geographical indication for the development of competitive advantages in the sector, the process of creating the geographical indication is discussed below, once to obtain competitive advantage it is necessary to understand its objectives, results, and also the development of the resource.

4.2 GI creation process

A geographical indication in Brazil can be classified into two types: i) indication of origin and ii) denomination of origin. One of the interviewees presents the difference between these concepts:

“I will explain the Brazilian legislation. According to the law, the Geographical Indication refers to a region that became known for producing a product or service, that is, in the region where it gained notoriety, recognition. And from that, that product gained recognition and
characteristics of that product. The denomination of origin, by law, requires that products have quality and features that are natural factors, such as climate and soil. There must be a very defined product profile. The denomination of origin, in the case of wines, requires that the products have more defined characteristics’’ (O4).

The project takes into account the characterization of natural aspects: climate, soil, physical and chemical characteristics, organoleptic properties of the products, characterization of the geographical area, and development of the regulation of use. The definition of an IO is a region that became known not only for the climate and soil. It can be associated with these elements, but not necessarily (O4). This issue was also pointed out in the works by Kakuta et al. (2006), Lages, Lagares and Braga (2005), Nierdele (2009), SEBRAE and INPI (2014), and Barbosa and Regalado (2013). As in the Brazilian case, which, in addition to the natural characteristics of the producing regions, there is also the history of the arrival of Italian immigrants in the late 19th century, bringing a little bit of Italian culture to Serra Gaúcha. This history adds value to products and notoriety to the region.

It should be noted that it is not necessary to have an IO to reach DO, as they are independent processes. In the case of Vale dos Vinhedos, growers started the work with the idea of IO, and with, this, it gained renown and quality. With this learning process, there was a higher qualification of production and the DO request was reached, that is, the IO experience prepared them to be a DO (O4).

Thus, following the definitions of the concepts of IO and DO, Table 2 shows an overview of the wineries interviewed, the region to which they belong, whether they have IO or DO, and the type of products that work within this system. It also presents the volume and wine varieties that are already being worked on by these producers with IO or DO.

<table>
<thead>
<tr>
<th>Winery</th>
<th>Region</th>
<th>IO</th>
<th>DO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don Laurindo</td>
<td>Vale dos Vinhedos</td>
<td>No longer works IO</td>
<td>1</td>
</tr>
<tr>
<td>Lidio Carraro</td>
<td>Vale dos Vinhedos</td>
<td>No longer works IO</td>
<td>Could use for a wine (Quorum) but is not using</td>
</tr>
<tr>
<td>Miolo</td>
<td>Vale dos Vinhedos</td>
<td>No longer works IO</td>
<td>Uses in some products like Lote 43, Cuvée Giuseppe, Merlot Terroir, and Millesime Sparkling</td>
</tr>
<tr>
<td>Peculiare</td>
<td>Vale dos Vinhedos</td>
<td>It entered when it was al-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ready in the transition to DO</td>
<td></td>
</tr>
<tr>
<td>Pizzato</td>
<td>Vale dos Vinhedos</td>
<td>No longer works IO</td>
<td></td>
</tr>
<tr>
<td>Milantino</td>
<td>Vale dos Vinhedos/Garibaldi</td>
<td>No longer works IO</td>
<td>1</td>
</tr>
<tr>
<td>Cooperativa</td>
<td>Pinto Bandeira</td>
<td>3 (a Pinot Noir red, a white</td>
<td>Does not have DO</td>
</tr>
<tr>
<td>Aurora</td>
<td></td>
<td>Chardonnay and a tradition-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>al method sparkling)</td>
<td></td>
</tr>
<tr>
<td>Valmarino</td>
<td>Pinto Bandeira</td>
<td>2 sparkling wines (can be</td>
<td>Does not have DO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>traditional and muscat)</td>
<td></td>
</tr>
<tr>
<td>Mioranza</td>
<td>Flores da Cunha</td>
<td>2 wines and sparkling wines</td>
<td>Does not have DO</td>
</tr>
<tr>
<td>Faé</td>
<td>Monte Belo do Sul</td>
<td>The first products will be</td>
<td>Does not have DO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>launched</td>
<td></td>
</tr>
<tr>
<td>Fantin</td>
<td>Monte Belo do Sul</td>
<td>The first products will be</td>
<td>Does not have DO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>launched</td>
<td></td>
</tr>
</tbody>
</table>

Source: Prepared by the authors

Despite still having IO, it is noteworthy that Vale dos Vinhedos opted to work only with DO, as reported in one of the interviews.
“The GI, with IO and DO modalities, has its value. Vale dos Vinhedos used the IO strategy to become known and increase the name of the region. This happened indeed. In the denomination of origin, they stopped doing much that was authorized in the Indication of Origin. In the Denomination of Origin, it has to be more specific products. So, possibly, their strategy is to increase the name of the region in specific products” (O4)

The other regions have only IO. Cooperativa Garibaldi, Pedrucci, Vaccaro, and Battistello wineries are not in Table 2 because they are not part of any GI but are part of the region of the collective brand CPEG in Garibaldi. Milantino winery is located in a territorial region that belongs to both Vale dos Vinhedos and Garibaldi so it can participate in both GI and CPEG.

Therefore, there is the experience of Vale dos Vinhedos and other wineries that are following a similar path. However, others are still unaware of the GI process, as shown in the excerpts below:

“No, we do not have these things for now. I know very little of what it would represent to us. I do not have much, maybe I am still young and fresh in the market, and with time we will get it too. When the time is right, we have to have it.” (V13)

According to interviewee O4, the process of creating a GI begins when producers from an interested region send the demand to EMBRAPA. Then, a diagnosis is performed to assess the existing potential and a Research and Development project is elaborated. SEBRAE has independent programs and there is also a partnership with the University of Caxias do Sul and other EMBRAPA units. The Ministry of Agriculture also supports the project and INPI carries out the recognition. In the end, an organ of the Secretariat of Agriculture signs the delimitation of the geographical areas (O4).

From the explanations of the interviewee O4, Figure 3 summarizes this process. The lines that link the R&D project to SEBRAE and the University of Caxias do Sul (UCS) are dashed because these organizations provide support to the process, while the INPI and the Secretariat of Agriculture act directly in the approval of the request.

Figure 3 - Process for requesting the GI creation

Source: Prepared by the authors
To exemplify the GI creation process, Table 3 shows some rules and definitions for IO and DO in some of the regions studied, such as Vale dos Vinhedos.

### Table 3 - IO/DO rules in the regions surveyed

<table>
<thead>
<tr>
<th>Region</th>
<th>Rules</th>
<th>IO</th>
<th>DO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vale dos Vinhedos</strong></td>
<td><strong>Grape production site</strong></td>
<td>At least 85% of grapes produced in Vale dos Vinhedos and is allowed up to 15% of grape properties outside it.</td>
<td>100% of the grapes produced in Vale dos Vinhedos</td>
</tr>
<tr>
<td></td>
<td><strong>System</strong></td>
<td>It could be trellising and/or espaller system</td>
<td>100% espaller and maximum of 10 tons/hectare</td>
</tr>
<tr>
<td></td>
<td><strong>Varieties</strong></td>
<td>12 varieties of red grapes and 10 varieties of white grapes</td>
<td>Red grape: Merlot</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>White grape: Chardonnay</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Varietal: 100% Merlot</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Varietal: 100% Chardonnay</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Assemblage Red: 60% Merlot and 40% Cabernet Franc and/or Cabernet Sauvignon and/or Tannat</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Assemblage White: 60% Chardonnay and 40% Riesling Italico</td>
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<td></td>
<td></td>
<td>Sparkling traditional method: 60% Pinot Noir/Chardonnay and 40% Riesling Italico</td>
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<tr>
<td></td>
<td><strong>Alcohol Content</strong></td>
<td>Minimum 12%</td>
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</tr>
<tr>
<td><strong>Monte Belo do Sul</strong></td>
<td><strong>System</strong></td>
<td>Trellising System</td>
<td>Do not have</td>
</tr>
<tr>
<td></td>
<td><strong>Varieties</strong></td>
<td>Red: Merlot, Cabernet Sauvignon</td>
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<td></td>
<td>White: Chardonnay, Riesling Italico. Produce Cabernet Franc, which is a differential in the region</td>
<td></td>
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<tr>
<td><strong>Farroupilha</strong></td>
<td><strong>Grape production site</strong></td>
<td>At least 85% of grapes produced in the municipality of Farroupilha, with up to 15% of grapes allowed outside the municipality, but within the defined region.</td>
<td>Do not have</td>
</tr>
<tr>
<td></td>
<td><strong>System</strong></td>
<td>Trellising System</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Varieties</strong></td>
<td>Red: 6 varieties of muscat grapes</td>
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Source: Prepared by the authors

Thus, for IO, it is allowed up to 15% of the grapes produced in another municipality outside the area defined. There is a determination for the type of system in the vineyard (trellising or espaller). Each one has its own rules for the shape of the yard, the distance between the vines, and the number of grapes allowed. Besides that, the permitted grape varieties are determined. For the DO - in this case, it only exists for Vale dos Vinhedos - 100% of the grapes must be produced in the area defined for the DO, which can be explained as follows:

"The whole process is from here (grapes, winemaking, aging, and bottling). The grower can buy grapes to complement his production as long as the grapes are produced within Vale dos Vinhedos and with proven documentation". (A2)

Thus, IO is related to the reputation and notoriety of the product and part of the raw material may come from another region. In the DO, the place influences the characteristics and quality
of the product, such as soil and climate, and the products must be produced, elaborated, processed or industrialized in the territory of origin defined (Junger, 2014; Barbosa, Regalado & Câmara, 2014; Seminário Internacional, 2014 (verbal information); Barbosa, Peralta & Fernandes, 2013; Rubini, Motta & Di Tommaso, 2013; SEBRAE & INPI, 2014).

4.3 Procedure for authorizing the use of GI

After the GI has been created, in order to use its logo, the products, that is, the wines must undergo a procedure to authorize the use of the GI. Thus, when the region is already recognized and has IO or DO, the growers, when they think they have products within the specifications, request the process that occurs as follows:

“Then the committee starts analyzing the documentation issues... if you are regular in the vineyard register... and if you have that area... that has a production per hectare... inspections of the vineyards are conducted to see if this is attended or not... the production per hectare... the number of nodes available to bear fruit... this is all regulated... the productions per hectare you see in the issuance of the invoice... that respects the issue of the legislation of APROVALE and DO... this goes to chemical analysis to see if everything is regular and then there is the tasting... and then it is made not only by APROVALE but it is together with EMBRAPA Uva e Vinho and with the staff from the University of Caxias as well... so this is the regulatory committee... If it is a wine that will mature it is evaluated again when it goes to the market... they will give me the numbering that goes on the back label which is the numbering of the DO... and I have the numbering of the winery and the DO... (V6)

Another grower complements this explanation:

“This year’s harvest is over... then you request to the Regulatory Council of Vale dos Vinhedos... I want so many liters of Merlot wine... you have to justify the raw material with the invoices to prove that the grape is from Vale dos Vinhedos, from the lot where this grape came from... it needs to have the register of the vineyard, if it is espaller and how many vines per hectare and what is the production per hectare... if it passes the verification... you take a sample and go to the chemical analysis and then go to the tasting... if the first one fails it does not go any further... it is open for some time for you to request... everyone has to order within that period... it does not depend on me... it depends on the Regulatory Council and the tasting at EMBRAPA... it takes time... but this is the strategy of each company...” (V1)

The performance of this strict procedure is important because through it that is possible to guarantee that the products that use the geographical indication logo have the established quality standard, this standard is ensured by the chemical and tasting analyzes that are carried out. In addition to quality, the procedure is also responsible for ensuring that the grape is actually from the established region. Thus, in the documentation analysis it is requested that the invoices of the grapes are sent by the wineries in order to prove its origin. Figure 4 shows this procedure.
To better understand and apply the concepts and rules presented, the case of the Vale dos Vinhedos GI project, which is a pioneer in the wine-growing sector, is discussed in the next section.

4.4 Vale dos Vinhedos GI project

The Vale dos Vinhedos GI project had, in the first 10 years, an indication of origin, which brought technical growth to associates, knowledge of the market, and improvement of equipment. With the arrival of the DO of wine - the third Brazilian after rice and shrimp - the amount of certified wines was reduced due to more restrictive rules. There was a reduction in the volume of wines with the seal. However, there was a gain in quality and sometimes even in results. (A2)

In this regard, for Sirmon et al. (2011), resource management includes structuring the resource portfolio (acquisition, accumulation), aggregating resources for capacity building (pioneering), and leveraging of these resources in the market to create value. Therefore, Vale dos Vinhedos was a pioneer and achieved the first IO in the wine sector in 2002 and DO in 2012.

With the advent of DO, members decided not to use IO anymore and focus only on using DO. “The DO is more rigid, has more rules, so it is a seal with more added value. It gives perception, allows the person who already understands this, who already knows about this subject, to pay more for it and know all the control” (V4). Concerning this matter, it is observed that:

“Today it has only the denomination of origin... we thought better and we are going to keep one... because imagine a pyramid... the bottom of this pyramid is to have a region that has certain recognition and that has varieties of wine grapes, the bottom of the pyramid we had... we went up one step of the pyramid and for the indication of origin we did the work... we go to another point of the pyramid (DO of Vale dos Vinhedos)... top of the pyramid... today we work the DO of Vale dos Vinhedos” (V1)

“According to the determination of Vale dos Vinhedos geographical indication, there was only the DO because we did not want to use the same name Vale dos Vinhedos for DO and IO and, according to INPI issues, this would be more difficult... but then IO was called Vale dos Vinhedos
and DO was called Vale dos Vinhedos. It could create confusion... but there is no difference, it only has to do with the region... it is the same region. Both are the same region. The DO is more demanding, more restrictive than the grapes that can enter wines with DO...” (V6)

Regarding the possibility of maintaining IO and DO at the same time, it was explained that IO is still available, but there is no interest in using it. In this option, there would be more products with a seal on the market, both IO and DO. However, the decision was to use only DO because growers believe that DO brings greater visibility to the region and products, adding value. Another reason is that IO and DO are registered as Vale dos Vinhedos and it would be difficult to communicate this difference to the consumer as it has the same registration name. Concerning consumer awareness: “Obviously, they no longer know what is a geographical indication, imagine when you have two of the same name”. (A2)

This decision is in line with the work of Bruch, Vieira and Barbosa (2014), which shows that only 9% of the studied sample knew what is a GI, pointing out Vale dos Vinhedos as a model and example of GI for Brazil and the wine sector.

With the new rules of the DO, more demanding than those of the IO, the DO was restricted in geography only concerning the altitude because in the parts of valleys it is not possible to produce. Before that, they had 50 to 60 wines per year from Vale dos Vinhedos with IO. With the DO, as the rules are restrictive, there is an average of 20 wines per year (V6). Some interviewees thus expressed their opinions:

“...being 100% Vale dos Vinhedos grape I have Tannat, I have Malbec, I have Cabernet Sauvignon, Ancellotta in red wines... Tannat is not possible, Malbec is not possible, Cabernet Sauvignon and Ancellotta are not possible... the only one that is possible is Merlot... I could then make an assemblage red with 60% Merlot and the other 40% with Cabernet Sauvignon and Tannat... I could make another one... but I am only making Merlot... 100% Merlot is the one with the DO.” (V1)

“For IO, it could be as long as it proved that 85% of the grapes were produced in Vale dos Vinhedos and the wines were approved in chemical and tasting analyses and that they used the authorized grapes that were practically all... with rare exceptions... there was no restriction of only Merlot and cuts with Merlot to be approved... I had Alicante Bouschet... Egiodola... Cabernet... Tannat... all with IO... So this was also a limiter...” (V6)

One of the wineries stated that it is a partner of APROVALE and that it used IO and would have the right to use DO in one of its wines produced with 100% of grapes from Vale dos Vinhedos. However, he thinks the standards created for the DO are outdated. In his production he maintains what he believes to be necessary for the quality of the product, not reaching the minimum of 60% of Merlot required in the DO. Thus, he reports: “...we will keep producing with the cut below 60% and guaranteeing the quality and being true... we will not put the seal saying that it is 60% if we are not achieving this...” (V2). Another interviewee adds: “The issue of 60% of Merlot is so strict to the point that today I think everyone is sorry... it is not just me... I think several colleagues are criticizing not having IO anymore...” (V6).

There are cases in which the wine had IO. Currently, it no longer has the seal, and it also does not fit in the grape varieties of the DO. Even so, the product continues to sell without IO, which indicates that the consumer made the link between the producer’s brand and the product and already recognizes that the product comes from that origin even though it no longer carries the IO seal. (A2)

Regarding DO specifications:

“...the grower has to improve in the field, the raw material has to be much better. Grape productivity indexes are different, they are much more restrictive and then when it starts
to appear in the product, in the quality of the product, the associate says ‘good, but if I do it with my other wine that does not have IO I will also have quality, I will have gains, I will have growth’. So, it is a way to leverage the qualitative growth of the product.” (A2)

According to interviewee A2, currently, the production of fine wines with DO is lower compared to the one with IO. However, current wines with DO undergo more strict quality inspection rules, and the process is more able to compete in the international market.

Having the Vale dos Vinhedos DO project as an example, other regions also want to become a DO in the future. In this way, ASPROVINHO wineries are thinking of asking for DO only for sparkling wines of Champenoise or traditional method and continue with IO for wines and sparkling muscatel (different from Vale dos Vinhedos’ decision to stop using IO and stay only with DO). In the case of DO, some adaptations in the production process will be necessary to meet all requirements (V9).

“...we are doing all the internal organizational part. We are already working with EMBRAPA for this project. It is already underway, but the referral to the INPI I believe it will only happen in the second half of 2016. In fact, we will stay with the indication of origin for some products and we will also have the denomination of origin. However, the denomination of origin will be only for sparkling wine - Indication of origin Pinto Bandeira. For the DO what is in the internal agreements is the Denomination of Origin Altos de Pinto Bandeira.” (A3)

APROMONTES component wineries are also interested in obtaining a DO in addition to the IO that they already have:

“This is all bureaucratic, it depends on other people, it depends on the competent body, and it depends on the people at APROMONTE. It is a lot of paper. Then it takes time... The difference of DO is that it delimits even more. So, we have an indication of origin, and the denomination of origin is even more limited, we have an indication of origin, which is, let’s suppose, the entire city. The DO is going to be a neighborhood.” (V12)

The first APROBELO products with IO were placed on the market in 2015 and the growers believe that they will gain visibility for the product and they also think that if they get a denomination of origin, this will bring greater credibility and a leap in the process in the future. (V10)

“APROBELO has not asked for the denomination of origin yet but it is the next step... I am already prepared for a denomination of origin, I am already producing in my territory, and I am not looking for grapes from other regions... it is complicated for those who do not plant in their region and look for other regions, which is a percentage that is accepted within the indication of origin but, to be a denomination of origin, all production must be in your territory, in your land... because you have to work the terroir of your region...” (V11)

From this discussion on IO and DO, the next topic points out the intangible results that can be obtained with GI.

### 4.5 Unique intangible results

Regarding intangible results obtained with the creation of geographical indications in the Brazilian wine sector, it was found that the GIs are recent initiatives and it is still difficult to measure the results of the products with the use of seals launched on the market. However, respondents indicate that there is an expectation of growth and of obtaining unique intangible resources, although it is not possible to know with what speed and intensity the visibility of these regions will increase. This result converges with those of Crubellate, Pascucci and Grave (2008) and Hart and Dowell (2011),
who claim that internal resources can be developed over time with benefits for the company’s image and visibility. Therefore, it is necessary commitment and effort of each grower in a systematic and continuous work that can be enhanced by public policy actions at state and federal levels. (O4)

Amit and Schoemaker (1993) and Mahoney (1995) claim that resources are converted into goods or services through their intangible assets (experience, information, know-how, management skills, brand, image, reputation, relationships, organizational culture, and knowledge). There is also the same perception from the perspective of the interviewees.

Besides, the interviewees’ opinion is in agreement with Brito and Brito (2011), who point out the difficulty of measuring competitive advantage, which cannot be measured by just one variable. In addition to the results in general market growth for the sector, there may be changes in the dissemination and growth of each winery, individually, compared to competitors. Thus, the interviewees believe that there were indirect returns with the advent of IO, but they are unable to measure the gains quantitatively. They state:

“...You end up selling more for the image, which brings returns. So, the image has improved. It does not mean that the added value has risen because of the IO, but it is the link to having this return. People start to like it and more people start to search for it...” (A3)

“So, if we do not have very objective results when it comes to evolution, commercialization of wines with geographical indication, if this is not statistically quantifiable in growth... We have a growth of other elements that make up this, which is not only the volume of sales. It is important, of course, and it is essential for the success of the company, but it made the growth very feasible. I think it was the seed of all this process”. (A2)

Barney, 1991; Mahoney, 1995; Peteraf, 1993; Maritan & Peteraf, 2011; Molloy et al, 2011).

4.6 Vision of the future

Respondents, when asked about their vision of the future regarding GIs, reported that Brazil has the potential to strengthen them and that they may represent significant value in exports in the future. In order to achieve results, it is necessary to put into practice what is currently in theory (A1, O4). One of the interviewees reports that:

“I joined EMBRAPA in the 1980s, and I did not think that these GIs would be interesting for wines. My dream is, before I retire, to have a recognized GI of wine. Now, we are already going to the fifth GI recognized. Besides, we are working on the process of 2 or 3. The wines have advanced a lot, exceeding all expectations” (O3)

Bruch, Vieira and Barbosa (2014) conducted a quantitative survey in Brazil with 250 respondents (university students, professors, and employees of a university in the state of Santa Catarina) on the wine sector about the evolution of the Brazilian distinctive signs (GI and Collective Brands) and concluded that 61% have some knowledge about GI and Collective Brands, 30% do not know, and 9% know about the topic. Of these, only 22% recognize the difference between IO and DO, showing that in addition to moving towards gaining more geographical indications for producing territories, it is also necessary to expand the work of communication and dissemination so that in the future consumers understand and start to consume and value products with IO and DO.
The work of Falcão and Révillion (2010) aimed to understand how oenophiles who participate in Brazilian brotherhoods perceive Geographical Indication. The results showed that 62% of the oenophiles consulted consider a high relationship between GI and wine quality. However, for 64% of the sample, foreign GIs are more reliable than national ones, which points to the need for actions that promote Brazilian GIs to increase the credibility of wineries and the production of national wines.

In addition, the emergence of recent wine-growing regions shows the possibilities of developing new Brazilian GIs:

"...None of that was done in the Northeast of Brazil until it recently started making table wine and, a few years ago, wines started to be produced. Consumers in the states of Pernambuco and Bahia already drink wines and we say, 'but how is it? This is ours; it has our accent, it has our face', it is stimulated by the origin. Here, in Rio Grande do Sul, the south of the border already has great productions. So, you sow in this country, in Santa Catarina too, that whole region is being sown. You have to push hard but it works" (A2)

They complement that the experience of geographic indication in Brazil is recent, as well as wine production itself. It is very new, and there is ground to progress and differentiate the products, using the GI as an instrument for this. (A2)

To illustrate the results presented, Figure 5 presents a concept map that summarizes the main ideas to obtain competitive advantage using geographical indications.

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**Figure 5 - GI concept map as a resource in the wine sector**

Source: Prepared by the authors
5 CONCLUSION

This study aimed to verify whether geographical indications can be considered an internal resource that generates competitive advantage for the Brazilian wine sector. Therefore, it was possible to observe that GI contributes to the construction of unique internal resources and possible generation of competitive advantage for the sector. This result is in line with the authors cited in the theoretical framework, who point to the influence of geographical location and the endowment of natural resources as constituents of competitive advantages within the wine sector. Therefore, it is concluded that GI projects can be seen as resources that are difficult to copy or replace, building knowledge, identifying terroirs, and redefining production practices, which can lead to the achievement of sustainable competitive advantage with increased exports and differentiated products to be offered in the market.

It is observed that the GI can be used as a unique intangible resource that increases the expectation of growth in the sector and the visibility of the demarcated regions, brings indirect returns, and improves the image of individual companies and the collectivity of the Brazilian wine sector. Thus, the interviewees see the future as a potential for increasing exports and specialization in differentiated products. Once the regions have GI or DO of specific grapes, the tendency is that they become known in the international market for their specificities, for example, the Merlot grape for the GI Vale dos Vinhedos region or sparkling grapes (Chardonnay; Riesling Italico; Pinot Noir) in Pinto Bandeira region.

A limitation of this study is the illustration of only one case of GI project (Vale dos Vinhedos), which is a pioneer in the wine-growing sector. Furthermore, it was qualitative, with in-depth interviews, as this work is considered still exploratory due to the lack of studies on Brazilian geographical indications. Thus, considering the present studies limitations, future studies can contribute by analyzing other cases of Brazilian geographical indications, both in the wine-growing sector and in other sectors, so that this phenomenon is better understood and managed in the country. Besides, quantitative and conclusive researches are also suggested, as they can provide more comprehensive results on the GI utilizations.

REFERENCES


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