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A resource based approach in the context of the emerging craft brewing industry

Abstract
Purpose: The purpose of this exploratory study is to examine the perceived resources, strengths, weaknesses, opportunities and threats from the perspective of micro and small brewery owners, managers and brewing masters operating in three countries. To this end, the study adopts the resource based view (RBV) of the firm, complemented by a SWOT analysis.

Design/methodology/approach: The research provides a mixed methods approach. Data were collected from craft breweries in Italy, Spain and the United Kingdom (UK). 165 valid responses were obtained from an online questionnaire, and an additional 24 face-to-face and telephone interviews with craft brewing operators in these three countries were conducted to further enrich the data. Independent samples t-test and Scheffé post hoc were used to analyse part of the quantitative data, while content analysis and word association were used for the qualitative component.

Findings: Product quality and uniqueness of product emerged as important perceived resources and strengths, suggesting an alignment with some of the resource related attributes postulated by the RBV, such as valuable, rare, and (un)substitutable. Other elements, such as natural and sustainable resources, including water quality and the current and future involvement in growing or sourcing raw products locally emerged as key resources, and are suggested as additional attributes. These strategic and tangible resources are however challenged by perceived weaknesses, particularly lack of financial, infrastructure and commercialisation resources, as well as threats from competition.

Originality/value: The exploratory study focuses on craft brewing from the perspective of micro/small operators. This industry has received very limited attention from the literature. The use of the RBV, with the potential to increase understanding of an emerging industry, and develop the theory further in this domain, adds to the originality and value of this research.

Keywords: Resource based view of the firm, resources, SWOT analysis, micro and small firms, craft brewing, entrepreneurship, Europe.

Paper type: Research paper

1. Introduction
Industry and news reports document the emergence of craft brewing around the world (e.g., Byrne, 2015; Ellingsworth, 2014; Greenblat, 2015; Maier, 2013; McAloon, 2015). Increasing numbers of craft breweries, particularly smaller firms, underline the strong growth within this industry. For instance, data from the Brewers Association (2015) illustrates that microbreweries constitute a key group within the brewing industry in the United States. Similarly, in the UK, it is estimated that a new brewery opens every second day, with currently over 1,400 breweries across Britain (Gov.UK, 2015).

The world-wide craft brewing phenomenon has also attracted the interest of academics, with studies investigating this industry in Italy (Fastigi et al., 2015), UK and Republic of Ireland (Danson et al., 2015; Maye, 2012; McGrath and O’Toole, 2013), Czech Republic (Maier, 2013), United States (e.g., Murray and Kline, 2015) and Australia (Watne and Hakala, 2011). One common characteristic identified in existing studies relates to the size of craft breweries, which is predominantly micro and small. This aspect is relevant to the
present study, which investigates entrepreneurial issues among micro and small craft breweries in three different European countries. For the purpose of the study, micro businesses are those employing fewer than 10 people, while small are those employing fewer than 50 (ESBA, 2011).

Despite these initial efforts to examine the burgeoning craft brewing industry, there is a clear dearth of knowledge in numerous areas and from different dimensions. Indeed, some authors underline that the field of “microbrewing continues to be underresearched” (Danson et al., 2015, p. 142), or that microbrewing research “has received limited attention in the economic geography literature” (Maye, 2012, p. 473). Further, there is an argument that “breweries are understudied… and [represent] a ripe area for investigation” (Murray and Kline, 2015, p. 4). Lack of research among small and microbreweries is also evident in regards to comparative studies highlighting differences or commonalities across regions or countries.

In response to some of these acknowledged research gaps, the present study takes a cross-country and mixed methods approach to investigate craft brewing in the context of micro and small enterprises, thus, contributing to the existing literature. Moreover, by investigating micro and small craft breweries operating in Italy, Spain, and the UK, the study provides an international perspective of craft brewing firms.

In addition, the study adopts the RBV of the firm (Barney, 1991; Wernerfelt, 1984); this theoretical foundation is further complemented by a strengths, weaknesses, opportunities and threats (SWOT) analysis to examine the following research questions:

What are participants’ main perceived resources as they relate to their firm?
Do responses vary according to the demographic characteristics of participants, or their firms?

Further, what are the main perceived:
   Strengths of the craft brewing firm?
   Weaknesses, if any?
   Existing opportunities?
   Threats faced by the firm?

Information resulting from addressing the questions above could be useful from practical and theoretical perspectives. For example, learning about the perceived resources and strengths of participants’ firms could provide practical information to the industry, government and regional bodies and entities of areas where firms might be capable to achieve business sustainability, contributing to value added to their production. Similarly, identifying weaknesses, potential opportunities and threats could better inform the industry, new entrants, or other businesses involved in this or other types of boutique industries that, as the United States’ craft brewery industry shows, may be primarily composed of micro and small firms. From a theoretical perspective, the adoption of the RBV of the firm could assist in facilitating the understanding of micro and small entrepreneurs’ perceived importance of existing resources and strengths in an emerging industry. Consequently, this investigation could also illuminate future research in this or other developing industries, as well as in those industries already established.

2. Literature Review
2.1 The RBV of the firm
For firms, products and resources “are two sides of the same coin” (Wernerfelt, 1984, p. 171); while most products may demand services of various resources, “most resources can be used
in several products” (Wernerfelt, 1984, p. 171). Edelman et al. (2005) refer to firm resources as capabilities, knowledge controlled by firms, processes, and all assets. Strategically relevant resources comprise human, physical, and organisational capital (Barney, 1991). Importantly, resources are heterogeneous (Edelman et al., 2005), with examples including knowledge and skills, material components, customers and suppliers, organisational routines (Karnøe and Garud, 2012), or technological skills (Wernerfelt, 1984). Resources are also represented by elements that could be thought of as strengths or weaknesses of a particular firm (Wernerfelt, 1984).

Various studies have contributed to developing the foundation of the RBV of the firm (e.g., Barney, 1986a, 1986b, 1991; Peteraf, 1993; Porter, 1980; Ulrich and Barney, 1984; Wernerfelt, 1984). Within the domain of resource based theory, traditional strategy insights regarding firms’ distinctive heterogeneous capabilities and competencies are incorporated (Mahoney and Pandian, 1992).

Barney’s (1991) research is of particular relevance to the present study. In referring to the seminal work of Porter (1985) and Rumelt (1984) on sustained competitive advantage, and further structured by subsequent contributions (Andrews, 1971; Ansoff, 1965; Hofer and Schendel, 1978), Barney (1991) presents a framework depicting the relationship between the SWOT analysis dimensions, the resource based model, and other models of industry attractiveness. Barney’s (1991) framework seeks to illustrate that firms can gain sustained competitive advantage by implementing strategies helping them exploit internal strengths in response to environmental opportunities, and neutralise external threats to minimise or avoid internal weaknesses. In this context, heterogeneity and immobility are requirements for firms’ management, as these elements may have significant impacts on sustained competitive advantage (Barney, 1991). Moreover, many firms, including competitors, can gain access to resources that are homogeneous or ‘perfectly mobile’ (Barney, 1991).

Although implicit in Barney’s (1991) framework, the links between competitive advantage and firms’ sustainability, are further discussed in the broader literature. Among other authors, Wagner and Schaltegger (2003) also propose a framework when they examine environmental and economic performance. The authors’ conceptualisation illustrates that explanatory factors (e.g., firm size, industry market structure, technology and processes operated) can lead to both social/environmental performance and business competitiveness-economic performance, also referred to as sustainable competitiveness (Wagner and Schaltegger, 2003).

Innovation, defined by Kanter (1983) as the generation, acceptance, and implementation of new products, services, or processes, is also critical for businesses’ survival, including to a firm’s differentiation strategies (e.g., Hull and Rothenberg, 2008). Innovation is therefore strongly associated with resources, competitive advantage, and sustained competitive advantage. Earlier research (e.g., Lengnick-Hall, 1992), recognises a multidimensional and complex connection between competitive advantage, technological advances, and innovation. McGrath et al. (1996) explain that for innovation projects to achieve competitive advantages, they must demonstrate reliable and successful achievement of business objectives, including the requirement that innovation team members be able to work proficiently (McGrath et al., 1996). These aspects further suggest the significance of team members’ skills, and therefore, of an organisation’s resources, with implications for its sustained competitive advantage.

The importance of firm resources is further discussed by Barney (1991), who highlights four key attributes:

Valuable. Resources are considered valuable when they can act as enablers for firms to consider or implement strategies that help improve their effectiveness or efficiency
(Barney, 1991). Moreover, resources must be valuable in order for firms to neutralise threats or exploit opportunities in their environment (Barney, 1991).

Rare among the firm’s potential or current competitors. In contrast, if similar resources are possessed by numerous firms potentially or actually competing in the same environment, those resources cannot contribute to sustained competitive advantage for one particular firm (Barney, 1991). The degree of rareness a value resource should be in order to generate a competitive advantage is difficult to estimate. However, it could be possible for a limited number of firms operating in a particular industry to possess a valuable resource and create a competitive advantage (Barney, 1991).

Imperfectly imitable. A firm’s resources fall under the category of imperfectly imitable due to one or more of the following reasons:

1) History dependent: In referring to the work of Dierickx and Cool (1989), Barney explains that a firm’s ability to have access to a certain resource depends on “unique historical conditions” (Barney, 1991, p. 107), and underlines the significance of history as a key determinant of a firm’s performance, and therefore competitive advantage. Regarding the element of uniqueness, Lockett et al. (2009) note that “If each firm is unique, any sample of firms is heterogeneous by definition” (p. 17).

2) Causally ambiguous: Causal ambiguity occurs when the association between the resources a firm controls and its “sustained competitive advantage is not understood or understood only very imperfectly” (Barney, 1991, p. 109). In this scenario, imitation or attempts to duplicate a firm’s successful strategies become difficult due to competitors’ lack of knowledge of which resources could be duplicated or imitated (Barney, 1991).

3) Social complexity or socially complex: when a firm’s resources are associated with “very complex social phenomena, beyond the ability of firms to systematically manage and influence” (Barney, 1991, p. 110), it becomes very difficult for other firms to imitate such resources. Barney (1991) acknowledges earlier studies to illustrate social complexity, for instance, a firm’s reputation among customers (e.g., Klein and Leffler, 1981), suppliers (Porter, 1980), firm culture (Barney 1986b), and interpersonal relations among firm managers (Hambrick, 1987).

(Un)substitutable: Firms’ resources should not be substitutable, that is, there should not be any strategically similar substitutes that are valuable, rare, or imperfectly imitable (Barney, 1991). However, Barney (1991) posits that at least two forms of substitutability can be identified. The first is when a firm is capable of substituting a similar resource, and be able to implement strategies of another successful firm, even when an exact imitation is unlikely (Barney, 1991). As an example, two management teams, while different in terms of their people, history, operating practices, or other ways, may be ‘strategically equivalent’, and therefore substitutes for each other. The second form is that firm resources that are very diverse “can also be strategic substitutes” (p. 111). In drawing from the work of Zucker (1977) and Pearce et al. (1987), Barney (1991) explains that if one firm has a charismatic leader, it may have a clear vision regarding its future. Further, management in a competing firm may also share a clear vision; however, such vision may reflect the firm’s company-wide strategic and systematic planning process. Both cases illustrate an equivalence in strategy; hence, the potential for firm sustainability exists (Barney, 1991).

Despite the value and use of the RBV of the firm in academic research, various authors have expressed concern, and identified some limitations. Lavie (2006), for instance, notes the criticism the theory has received for not sufficiently emphasising the costs related to the acquisition or development of resources. Earlier, Priem and Butler (2001) opened a debate, to which Barney (2001) subsequently responded, concerning RBV’s “static argument” (p. 33), which “identifies generic characteristics of rent-generating resources without much
attention to differing situations or resource comparisons” (p. 33). These authors also contend that various resources associated with the theory, including tacit knowledge, can be “inherently difficult for practitioners to manipulate” (p. 33). Thus, the level of abstraction in the RBV’s static method potentially limits “its usefulness for strategy researchers” (Priem and Butler, 2001, p. 34).

2.2 The RBV of the firm, micro and small firms
Research by Barney, Wright, and Ketchen (2001) illustrates a number of disciplines where the RBV of the firm has made valuable contributions, including in entrepreneurship and international business, citing the work of Alvarez and Busenitz (2001) and Peng (2001), respectively. Several contributions are also noticed in the context of the RBV of the firm and micro and small enterprises. For example, Kelliher and Reindl (2009) acknowledge the relevance of the RBV in a micro-firm context; they also identify a knowledge gap, namely, in that, historically, academic research focusing specifically on micro-firms has been scant. The authors explain that, because a firm’s long-term survival depends on various unique offerings, developing such uniqueness over time demands the “nurturing of a firm’s core competencies” (p. 525). However, micro firms are confronted with ‘resource poverty’, forcing them to operate under significant financial, expertise, or time constraints (Kelliher and Reindl, 2009). Moreover, underlying internal as well as external issues may limit “optimum management practices” (Kelliher and Reindl, 2009, p. 530) within micro firm management.

A second study (Masakure et al., 2009) also highlights the usefulness of the resource based theory in helping understand the association between internal resources and the broader “operating environment on microenterprise performance” (Masakure et al., 2009, p. 479). In particular, findings reveal that an entrepreneur’s characteristics do not appear to substantially influence the firm’s performance (Masakure et al., 2009). In contrast, both the firm and entrepreneurial characteristics, which collectively reflect “the enterprise’s internal resources” (Masakure et al., 2009, p. 479) appear to affect performance significantly.

A third study (Forsman, 2001) adopts the theory when it investigates small-scale food processing firms. Forsman (2001) posits that small-scale firms’ resources are often perceived negatively, in that, usually, these firms’ resources are limited or scarce, particularly in the area of internal finances, an impediment that limits the scope of executing marketing activities. Aligned with Forsman’s (2001) research, Karadeniz and Göçer (2007) also identify severe constraints in personnel and technological resources among small firms. To counter these limitations, the importance of “resources in small-scale firms is… much broader as the specific resources” (Forsman, 2001, p. 54). Such importance underlines the potential for these firms to exploit special resources, or a combination of resources, that would serve as a platform for differentiation, particularly differentiating themselves from larger firms (Forsman, 2001).

The present exploratory study seeks to contribute to the literature of the RBV of the firm, exploring perceptions of resources, as well as perceived strengths, weaknesses, opportunities and threats among micro and small craft brewery owners, managers, and brewing masters operating in three different countries. In doing so, the study seeks to narrow existing knowledge gaps previously identified, both regarding micro firm (Kelliher and Reindl, 2009), and microbrewing entrepreneurship research (Danson et al. 2015; Maye, 2012; Murray and Kline, 2015).

3. Methods
This study explores micro and small breweries operating in three different European nations. The main themes under investigation include the perceptions of owners, managers, and
brewing masters regarding the resources they possess, as well as their perceptions on the firm’s strengths, weaknesses, opportunities, and threats. To this end, the study adopts the RBV of the firm, and supports this framework by incorporating a SWOT analysis, an approach partly aligned with earlier research. For instance, Houben et al. (1999) explain that the investigation of firms’ internal environment is associated with strengths and weaknesses, and that of their external environment with opportunities and threats. Within the internal environment, several variables are identified, and include firms’ culture, their structure, and, importantly, their resources (Houben et al., 1999). As documented in research by Bernroider (2002), a SWOT analysis can also provide useful insights when researching micro, small and medium enterprises (SMEs). However, weaknesses are also identified, in particular, in that the analysis may result in the uncritical presentation of lists of items, without evident prioritisation, where “weak opportunities may appear to balance strong threats” (Lin and Tsai, 2009, p. 423).

An initial meeting of a regional craft brewers’ association located near one of the authors’ university in early 2015 provided an opportunity for gathering first-hand information to design the questionnaire tool. Further, while limited in number, several studies on craft brewing entrepreneurship were also adopted in the process of designing the questionnaire. Research studies by Maye (2012) on commodity chains from a UK perspective, and by McGrath and O’Toole (2013) on network capabilities among Irish microbreweries were among those considered. In addition, in the absence of an established body of craft brewing research focussing on the themes under investigation, the wine entrepreneurship literature provided valuable insights to further develop the questionnaire tool (section 2). For instance, wine research on building brands (Reid, 2002), innovation (Doloreux et al., 2013), international strategies (Felzensztein, 2011), consumption intensity (Martinez-Carrasco et al., 2005), territorial value and history (Begalli et al., 2014), and resilience among winery operators (Duarte Alonso and Bressan, 2015) was considered.

For the purposes of the present study, the questionnaire was divided into three sections. The first section gathered demographic data about participants and their firms (Table 1), while the second sought to learn which resources were perceived as most important (Table 2). This section used a Likert-type scale, where 1 = strongly agree, and 5 = strongly disagree, for participants to rank a number of items pertaining to their firm’s resources. The third section provided four sub-sections, with open-ended questions, asking participants to indicate, in typing, their perceived strengths, weaknesses, opportunities, and threats as these apply to their firms. Other areas investigated in the study are beyond its focus, and might be addressed in future research.

Various reasons determined the choice of the three countries. First, the magnitude of the three nations in numbers of firms was considered significant for the scope of the study. Indeed, the chosen countries are among the top 10 in the EU for microbreweries (Brewers of Europe, 2015). According to 2014 figures, the UK holds the first position in numbers of microbrewers, Italy the third, and Spain the sixth (Brewers of Europe, 2015). The growth of microbreweries in these countries between 2009 and 2015 has been impressive. Indeed, in 2009 there were 694 microbreweries in the UK, 242 in Italy, and only 27 in Spain; in 2015 the numbers grew to 1,414 (UK), 505 (Italy), and 314 (Spain) (Brewers of Europe, 2015). Together, these countries account for 50% of all existing microbreweries in 28 EU countries, which totals 4,459 as of 2015 (Brewers of Europe, 2015).

Second, the authors’ familiarity with the geographic environment, namely, with the existence of craft brewer associations and individual breweries in towns/cities known to them was also important. Third, the knowledge of the researchers of local/national craft brewer associations, webpages of national/regional craft brewery listings, and individual craft
breweries helped the more straightforward identification of potential participants in each country. Moreover, language and other barriers, such as lack of clear information of craft brewery listings, prevented the identification of a sufficiently large number of potential participants in other European countries.

The designed questionnaire was available in English, Italian, and Spanish. The research team members, some of whom are proficient in these languages, translated and proof-read the content of the three questionnaires. Despite the apparent shortcomings of using an online questionnaire to collect data, particularly in terms of modest response rates (e.g., Bardach et al., 2015, Jin, 2011), this alternative was chosen due to various limitations, including lack of financial, human, and time resources to travel for months to meet and interview individual craft brewery operators, or call hundreds of them to collect the data. The option of sending paper questionnaires was also ruled out due to its significant cost, and, based on recent research (e.g., Tang et al. 2014), because low number of responses might be achieved.

3.1 Data collection and analysis
During May of 2015, email messages were sent to 926 craft breweries in Italy (282), Spain (212), and the UK (432), whose email addresses were found through a search in various sources, particularly webpages (e.g., siba.co.uk; www.mondobirra.org; www.cervezasnacionales.es). The content of the message indicated the objectives of the study, its potential benefits, and invited recipients to take part in the study, clicking on a URL link that opened the online questionnaire on a separate page. As many as 106 messages bounced back (Italy: 33, Spain: 41, and UK: 32). Between May and July of 2015, several reminder messages were sent to the remaining 820 valid email addresses. These efforts contributed to collecting 168 useful responses. A closer look revealed that three firms employ 20 or more full-time staff, while all other firms employ fewer than 20 staff. As a result, 165 responses were considered, representing 20.1% of those contacted (165/820).

In addition to the online questionnaires, the agreement of 24 operators was obtained to conduct a mix of face-to-face and telephone interviews between July and September of 2015 with six brewers in Italy, eight in Spain, and 10 in the UK. These interviews lasted on average 40 minutes. Thus, in total, 189 valid responses were obtained, an overall 22.4% response rate (189/844). A final complement to the data collected was the visit to two events by one of the researchers while interviewing Spanish participants, which provided useful visual and qualitative insights. One event was a food and craft brewer festival in the outskirts of Barcelona, which attracted the participation of 16 craft local breweries, and the second a nation-wide craft brewers’ meeting in Barcelona, attended by over 40 craft brewery operators from various Spanish provinces.

Thus, both the online questionnaire and interviews provide a combination of quantitative and qualitative data collection methodologies. The quantitative data (Table 2) were exported into SPSS, version 22; as applicable, independent samples t-test and ANOVA (Scheffé post hoc) tests were used. The qualitative data were analysed using qualitative content analysis (Hsieh and Shannon, 2005; Schreier, 2012; Weber, 1990), and word association (Roininen et al., 2006). Verbatim responses appearing in the next sections are abbreviated as P1IT (Participant 1, Italy), P2S (Participant 2, Spain), and P3UK (Participant 3, UK).

3.2 Demographic characteristics
The online questionnaire responses indicate that two-thirds of the participants were owners, and that 72.1% produced 100,000 or fewer litres of craft beer (Table 1). A distinctive history
in beer consumption in the UK has been identified, with pubs, for instance, being “ubiquitous to the traditional English village” (Knowles and Dingle, 1996, p. 29). That almost one-third of the participating UK firms have existed for over two decades, compared to a much lower percentage of Italian firms, and only one Spanish participant partly supports the above notion. In contrast, the large majority (70%) of Spanish firms in this study were relatively new. Almost three fourths of the participating firms employed between one and nine staff, with over 80% of Italian and UK craft breweries employing at least one person; in contrast, over 40% of Spanish firms did not employ any staff. Further, a clear gender divide was noticed, with males clearly being the dominant group, particularly in the case of Spanish firms (91.7%). A ratio of almost one to three was noticed regarding exports, with less than 30% of firms currently exporting. Among these, however, the percentage of Spanish craft breweries was higher than that of the other two groups. No major differences were noticed between Table 1’s participants and those 24 interviewed regarding different demographic characteristics. For example, only one of the respondents has been in the craft brewing industry for over 10 years; in contrast, the large majority opened their brewery in the last five years. Similarly, in terms of gender, only two of the 24 interviewed individuals were female.

\textbf{Table 1 Here}

\textbf{4. Results}

4.1 Perceived resources firms possess

A list of nine items identifying various firm resources was made available to participants in the online questionnaire (Table 2); space was also provided at the bottom of the question to add comments. To determine the reliability of those items, a reliability analysis was run, resulting in a Cronbach’s Alpha of .772. Relatively high means resulted in five of the items, clearly demonstrating that participants felt strongly about such resources as the quality of the craft beer, with direct implications for breweries’ reputation, and expertise in brewing.

Regarding the quality of the beer product, P1UK for example stated: “If a brewery puts out bad beer in our area it can impact all small producers.” For P1IT, beer quality “is the main factor for this brewery and the entire sector. We love when our customers call to inform us that their beer is finished, and that they want more. This is a great sign; it means the quality of the product is high and that people like it.”

\textbf{Table 2 Here}

The perceived quality of the service offered before and after sales to consumers and distributors was also acknowledged as a very important resource. P1IT, for instance, mentioned ‘the people’ to explain the importance of being surrounded by knowledgeable and passionate individuals with the right attitude or personality to do their work. The respondent further explained that “In this sector, the human factor goes hand in hand with the [product] quality factor, and the human factor represents 50% of success in this sector.” Similarly, P2UK noted that “A passionate sales force is critical.”

In addition, knowledge of brewing, the territory/region where the brewery is located, and continuous innovation in the brewery scored close to the level of agreement. At the other end, business strategies did not appear to be perceived as important resources.

Overall, the level of agreement among participants from all three countries suggests that they viewed the importance of resources in a very similar way. However, a statistically significant difference (p<0.001) was noticed when comparing participants’ countries and the item highlighting the territory/region where the brewery is located. As noted (Table 2), the Spanish participants (mean=4.22) clearly perceived this resource as being more important
than did the UK participants (mean= 3.57). One reason for this finding may be the physical location of the craft brewery, such as in a small town where the geographic environment may be appealing to visitors, versus a location in an urban sprawl, with few ‘natural’ links to the craft beer product. Statistically significant differences also emerged based on the gender of participants, even when in all three cases both groups clearly indicated agreement. First, female participants agreed more (mean=5.00) than males (mean=4.86) with the quality of the beer as a significant resource (p<0.001). Similarly, female respondents (mean=4.85) were more in agreement than males (mean=4.48) regarding the quality of the service (p<0.001). Finally, female participants’ level of agreement (mean=4.84) was also higher than that of males (mean=4.42) concerning the knowledge of brewing (p<0.001).

Content analysis used to examine participants’ comments also identified the importance of natural and sustainable resources and practices. First, because craft brewing is a process, which entails the use of different products, various comments underlined water quality as a key element potentially contributing to sustained competitive advantage. Indeed, P3UK acknowledged the use of spring water from a local well as a key resource for the brewery. P1SP mentioned water quality as the main resource, while P2SP referred to the region’s image, where ground water and nature were perceived as ‘clean and green.’ Further, P2IT agreed that “beer is connected with the territory where it is produced. The first link is with the water you use; almost 95% of the beer product consists of water…” Second, the aspect of sustainability was also associated with perceived resources, with several responses noting that all ingredients used in craft beer production are sourced from within the country. Aligned with sustainability, P4UK emphasised authentic and genuine elements incorporated in the production process: “Our brewery makes cask and bottle conditioned beer, a living product that generates its own carbonation and develops during aging. This is not necessarily the case with so called ‘craft breweries’ that may be producing a product the consumer believes is ‘Real Ale’ because it is made by a craft brewery.”

Reaffirming the significance of sustainability, by sourcing products locally/regionally, P5UK mentioned that “we only use hops grown in the midlands of the UK where our brewery is based”, while P3IT indicated that the brewery had an integrated production supply as a key resource. Finally, three Italian and four Spanish interviewees were planning to either grow, or contract-grow wheat and hops in their region, as opposed to importing them, illustrating a concern for more ‘control’ of the supply chain, and a stronger association with the locality or origin of the products, with potential implications for the image and long-term sustainability of their firm.

4.2 Perceived strengths, weakness, opportunities and threats
Content analysis and word association helped identify both internal and external issues among participants (Table 3). First, in line with Houben et al.’s (1999) notion that companies’ resources relate to their internal environment, participants’ perceived strengths of their craft brewery illustrate associations between these strengths and their craft brewery resources. For example, product quality emerged as a key strength, particularly among Italian participants. Uniqueness of the product, as well as the perception of making a local product were also perceived strengths among Italian and Spanish participants. These perceived strengths, however, were not shared among UK participants. One reason for this finding could be the ‘novelty’ aspect of craft brewing in Italy and Spain as opposed to the UK, where the trendy element of craft brewing may be weaker given the longer history of production/consumption. Another reason could be associated with the level to which craft brewers may be experimenting with local products.
One of the interviewees (P6UK), an Italian entrepreneur living in the UK for nearly a decade, exemplifies the aspect of uniqueness of the product, namely, by blending originality, knowledge, expertise, and use of local products to try new craft beer flavours, adding more creativity to the craft brewing process and beyond. Indeed, according to P6UK, some of his ideas had originated in Italy, and his regular travels to his Italian birth region also allowed the participant to learn or reinforce traditional ways of craft brewing and food production less known or practiced in the UK. These ideas proved successful among patrons to P6UK’s business, where he also provided culinary experiences, producing his own cheeses and charcuterie products onsite, using Italian recipes and UK products, thus, transforming originality into perceived uniqueness, using local products to cater primarily for UK consumers.

As the response percentages illustrate, product brand image/reputation and management strategies emerged as common elements among all three groups. However, while agreement was strong regarding the perceived quality of service as a firm resource (Table 2), this key element was only partly confirmed in the subsequent SWOT analysis (Table 3). This finding has important implications; in particular, it emphasises the usefulness of investigating resources and strengths separately to confirm or disconfirm initial perceptions.

Table 3 Here

Content analysis and word association also identified differences between participants’ country and main perceived weaknesses. First, lack of finances was a fundamental weakness perceived among Spanish and Italian participants, though only marginally for UK entrepreneurs. This finding is not surprising, and is in agreement with the academic literature (Bernroider, 2002; Forsman, 2001; Kelliher and Reinl, 2009; Williamson et al., 2012) and reports (e.g., European Parliament, 2015). A second perceived weakness, lack of managerial knowledge, appeared to be much more prevalent among Italian participants, while commercialising the final product, and lack of infrastructure were weaknesses affecting all three groups, primarily Spanish participants. Some salient comments further highlighted the severity of some of these perceived weaknesses:

P3SP: Financing has been very complicated, and continues to affect us negatively... If I could buy raw products in large quantities, costs would decrease. The problem is that to buy in large quantities you need lots of money...
P7UK: Failure to keep up with social media to promote our product.
P8UK: Difficulty of getting our product further afield than the local area.
P4IT: Lack of marketing performance; we make a great product but we are not great sales people...
P5IT: Lack of financial resources; we struggle in cashing in on our sales (on-credit); limited time.

The potential for increasing exports, more demand at a local or national level, and increasing interest in craft beer products and consumption were the main perceived opportunities. Italian participants, for instance, recognised the opportunity for exports and increasing demand more strongly than the other two groups, while a visibly larger percentage of Spanish participants recognised opportunities from a growing craft beer culture. The interviews conducted in Spain further strengthened this finding, with P4SP stating: "There is an increasing movement, with some consumer segments looking for products that are not
mass-produced, more boutique style. Spanish consumers tend to be more accepting of new foods products...” This point was further supported by P5SP, who indicated that “Ten years ago, craft beer did almost not exist; however, little by little people are getting to know the products.”

All three groups identified the potential to expand and grow the firm more; this finding is to some extent associated with the other perceived opportunities. Concerning this point, P6IT stated: “We foresee opportunities because there is an expanding market segment looking for quality products.” At the other end, despite the culinary tradition of Italy and Spain, UK participants perceived more potential, if only slightly, in craft beer becoming more associated with hospitality and tourism.

Competition was clearly participants’ strongest perceived threat (Table 3), partly mirroring similar concerns in the wine industry (e.g., Flint and Golicić, 2009; Simon-Elorz et al., 2015). The intensity of competition seemed to be stronger among UK participants, with potentially negative implications, as P9UK acknowledged: “Growing number of brewers of poor quality; beer selling cheaply, undervaluing the craft brewing industry; traditional pub closures.” However, while brewery numbers are currently much lower than in the UK, this threat was also significant among the other two groups, and supported by verbatim comments, both in the online questionnaire and during the interviews. For instance, all eight Spanish interviewees, regardless of their current location, used the term ‘natural selection’ to emphasise that, lacking the fundamental resources (e.g., managerial, marketing, financial), many of the new craft breweries will not survive in the long term. In this regard, P6SP noted: “There are many people who have no idea of how to make beer. They became jobless, received a payout from their previous employer, and started a craft brewery... for those reasons, there are already a number of craft brewing firms folding...” Italian participants also identified the potential of a ‘natural selection’ of microbreweries, with P7IT recognising: “This is an industry in turmoil, with many companies entering in the last few years. I expect some ‘trimming down’ in the industry the near future.”

Finally, a much higher percentage of Italian participants perceived financial issues as the most serious threat. In the absence of imminent improvements or support, P7IT explained that, “Currently, our industry has significantly higher production costs than in other European countries. In the next few years, we need to develop synergies that help us decrease our costs. In contrast, the perceived burden of financial constraints did not seem to be as serious among UK participants.

5. Discussion
The findings from the quantitative and qualitative data are strongly associated with the attributes of RBV of the firm postulated by Barney (1991), and are illustrated in Figure 1. Overall, it is argued that the perceived important resources (Table 2), and strengths (Table 3) could interchangeably fit into several of those attributes. In addition, adopting a SWOT analysis assisted in helping to confirm or disconfirm some perceived important resources.

First, the ‘valuable’ attribute was recognised in terms of the product and service quality, and knowledge of brewing. Together, these elements can result in the implementation of strategies to improve efficiency (Barney, 1991), including to maintain product consistency. In doing so, the firm may become a synonym for quality and reliable products and services in the eyes of its consumers. However, adopting a SWOT analysis only partly confirmed the importance of service quality as one of the firm’s strengths, partly identifying a gap concerning this resource.

Second, ‘rareness’ also relates to the perceived product and service quality, namely, in using different, local ingredients, or in implementing brewing and other forms of knowledge
to develop different beer profiles, or market the beer products. Rareness in this production/marketing context could also have implications in regards to contributing to a firm’s heterogeneity/immobility, thus, potentially helping the firm differentiate from others. Some of the main perceived strengths of the firm (Table 3), particularly the uniqueness of the beer product, which requires the creative and ingenious actions of the individual craft brewer, or a craft brewing team, may also be considered rare, and also contribute to a certain degree of heterogeneity/immobility and to a firm’s competitive advantage.

Third, regarding the imperfect imitable attribute (Barney, 1991), the sub-element of ‘history dependent’, or unique historical conditions relates to the findings. This element could be important among the more traditional firms, or those that have operated for decades, as it appears to be the case among nearly one third of the participating UK breweries. Indeed, while no statistically significant differences were noticed, UK participants ranked the history of the beer product clearly higher than the other two groups. In contrast, Spanish participants consider the territory much more important, suggesting an element potentially enabling craft breweries located in different geographic regions to become ‘imperfectly imitable’, gaining a stronghold locally, and gaining competitive advantage. In this context, ‘causal ambiguity’ (Barney, 1991) also seems to apply, as local knowledge (i.e. consumers, suppliers, relationships) may combine to provide an edge to already operating firms, making duplication attempts by potential new entrants difficult. The element of ‘social complexity’ (Barney, 1991) is also identifiable in the form of reputation of the product (Table 2), which also fits within valuable and rare resources.

Fourth, the attribute of (un)substitutability (Barney, 1991) is identifiable in the form of management strategies. However, the proliferation of more microbreweries underlines the potential for duplication or the likely substitutability of strategies by new entrants or existing competitors. As reflected in participants’ comments, this situation may result in an environment where ‘natural selections’ occur. In order to minimise this threat, and as identified in the findings, management’s expertise, and knowledge of the industry, as well as other resources (e.g., product quality, reputation, uniqueness), may assist breweries to prevent substitutability, and achieve or secure sustained competitive advantage.

An alternative, fifth attribute, was identified in the form of natural/sustainable resources. Importantly, the fact that a number of participants intended to grow or locally/regionally source wheat and hops may strengthen firms, namely, in terms of increased heterogeneity heterogeneity/immobility, differentiating those breweries, and enhancing their image as advocates for sustainable practices, or even corporate social responsibility (CSR). In fact, Porter and Kramer (2006) underline the importance of CSR for companies beyond costs or constraints, as it could lead to innovation, opportunities, and competitive advantage. Some studies (Flint and Golicic, 2009; Gabzdyllova et al., 2009) also report that CSR is already being implemented in the wine industry to some extent. Similarly, the perceived importance of the region’s water quality suggests the significance of natural resources as a differentiating factor for craft brewing, offering consumers a high quality, safer, and more traceable final product. The ‘locality’ of both products and practices represent advantages for craft brewer operators, and also barriers to homogeneity/mobility by new entrants or competitors.

6. Conclusions
This exploratory study examined an emerging industry from the perspective of micro and small firm operators through the lens of the RBV of the firm, and complemented with a
SWOT analysis. In doing so, the study sought to a) address knowledge gaps identified by other researchers (Danson et al., 2015; Maye, 2012; Murray and Kline, 2015), b) provide a cross-country perspective, comparing three EU countries, and c) adopt the RBV in the context of craft-brewing entrepreneurship.

The findings clearly identified the importance of product and service quality, reputation of the beer product, expertise in brewing, the history of the product, and knowledge of brewing as key resources. Statistically significant differences were limited, confirming that levels of agreement regarding the studied items (Table 2) were very similar regardless of the demographic characteristics of respondents, their firms, and importantly, participants’ countries. The addition of the SWOT analysis, together with content analysis, and word association further reaffirmed the importance of product quality, followed by the uniqueness of the product; in contrast, the element of service quality was only marginally considered, illustrating the value of using various measurements to identify resources/strengths. Opportunities such as exports, more demand, and interest among consumers were identified; however, financial as well as marketing issues were perceived barriers to growth and success. These issues may be aggravated by perceived competition in the form of saturation of the industry, and difficulty in having access to financial resources.

6.1 Implications

From a practical viewpoint, one important implication is the identification of key resources needed for the participating firms to achieve long-term sustainability. For example, the recognition of product quality, uniqueness in the form of creative, ingenuity, experimentation (trial and error), and emphasis on local products, among other significant elements, re-emphasise various vital entrepreneurial traits and initiatives needed. The implication of this information, as is the identification of weaknesses, threats, but also opportunities, is its significance for craft brewing stakeholders, particularly entrepreneurs, industry managers, government agencies, and even financial entities. Fundamentally, the information may assist in the understanding of contemporary issues affecting this group of firms involved in a rapidly growing industry, and potentially, provide a baseline or precedent, which practitioners could refer to when seeking to understand the needs and wants of entrepreneurs in other emerging industries.

One theoretical implication is the confirmed usefulness of the RBV of the firm to study an emerging industry. The associations between the findings and the different attributes presented by Barney (1991), as well as their impacts on heterogeneity/immobility from a strategic perspective, and therefore on firms’ competitive advantage, contributed to the understanding of entrepreneurial aspects of craft brewing. This outcome also implies the usefulness, and therefore the need to consider the theory in future craft brewery entrepreneurship research.

Another implication is the potential to develop theory in the context of micro and small business research. Indeed, the findings suggest that an additional attribute, namely, ‘natural/sustainable’ could be incorporated in the context of craft brewing. Moreover, participants’ views of existing valuable natural resources in their region (e.g., quality of the water), as well as their intention to become more involved in sustainable production practices demonstrate the value of considering the identified attribute in terms of product differentiation and sustained competitive advantage. Such consideration may also help confirm or disconfirm the significance of the natural/sustained attribute in future craft brewing research adopting the RBV of the firm.

6.2 Limitations and Future Research
Compared to the much higher numbers of existing craft breweries in the corresponding countries, it is evident that the number of collected responses constitutes a limitation of the present study. The lack of choosing different seasons to gather the data, lack of longitudinal replication, and the absence of other countries, where the number of craft breweries is also increasing, are additional identified limitations. However, despite these issues, this exploration was, to the knowledge of the authors, a first attempt to provide a cross-country comparative research of micro and small craft breweries to investigate the themes above, and make different comparisons. The findings and acknowledged limitations also present a platform to develop future research avenues. Increasing the number of participants, and that of countries, including countries outside the EU, is an exciting opportunity- and also challenge- that could provide a much broader content of information about craft brewing entrepreneurs, including with regard to their most important resources, as well as their perceived strengths, weaknesses, opportunities, and threats.

Longitudinal research studies could also be considered in future craft brewing investigations. Together, these suggested research paths could contribute to assessing, or comparing, previous versus more recent developments, including developments associated with the themes investigated in the present study. These efforts could better inform practitioners, government representatives, and academics about a very dynamic industry, where very rapid growth may also have implications for firms’ life-cycle. Moreover, learning about resources, and what elements may help entrepreneurs gain competitive and sustained competitive advantage could be vital in order for micro and small businesses operating in the craft-brewing, or other emerging industries to build resilience while minimising threats. Finally, future research could consider the RBV of the firm to assist in gaining more understanding, potentially contributing to the development of the theory in the context of the craft-brewing, or that of other burgeoning industries.

7. References
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