

Corso di Laurea magistrale in Economia

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Tesi di Laurea

Business practices in the craft beer industry.

An international comparative study.

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Introduction

Over the last few decades, craft beer industry gained great success and credibility. It originated from a movement of people led by passion for beer, and it fast became a real economic business able to find its own place in the beer industry, which is traditionally concentrated and dominated by few multinational corporations.

This research will provide an international comparative analysis between U.S. and Italian craft beer industry. It will focus in particular on North Carolina and North East Italy.

More specifically, it will investigate the main factors that led to the rise and establishment of a large number of craft breweries. This big success they obtained is proved by data showing the number of new breweries established over the last years. In Italy there are now more than 500 microbreweries and more than 2,000 in U.S.

The increase in the number of craft breweries made beer industry from concentrated to fragmented, and able to provide a variety of differentiated type of beers. Beer industry has, in fact, always been dominated by Multinational Corporations and only twenty years ago, the variety of beers available on the market was limited.

The tool gave craft brewers the chance of converting their passion in a real economic business is represented by the network affiliation. Being small businesses, craft breweries are characterized by structural limits, especially due to their limited size. To overcome these obstacles and take advantage of network opportunities, they developed new capabilities in order to use external resources and built strategic relationships. The aim of this study focuses on understanding dynamics that allowed small breweries to obtain resources during the start-up process and the evolution of their network relationships in the growing phase.

More specifically, it will shed light on the role of networks in the craft breweries' development.

The research questions leading the study: What are the factors underpinning the rise of the craft beer industry? What is the current configuration of microbreweries' value chain?, will be sustained and supported by a theoretical background that crosses entrepreneurship theory and network-based researches. More specifically, the analysis will be conducted by using the Global Value Chains (GVCs) approach that will allow highlighting a specific portion of the network and the relationships dynamism over the time. GVC's approach, in fact, focuses mainly on the relationships between buyers and first-tier suppliers and on the way these relationships are governed.

The theoretical discussion will be integrated by an empirical analysis. The study will provide the analysis of eight case studies, four located in North Carolina and four located in North East Italy.

In this section will be investigate the push factors leading to the establishment of the business (entrepreneurial motivation, new demand, access to assets and equipment, and the role of laws and regulation) and the current value chain configuration. The empirical study of these businesses will provide an international comparative analysis of craft beer industry between North East Italy and North Carolina.

The first chapter will provide a brief explanation of craft beer industry development over the last decades. In particular, it will focus on the main factors allowing the establishment of this business.

The second chapter will provide the theoretical background. It will highlight how entrepreneurship theory and network researches have crossed over the last fifteen years. It will also explain the choice of adopting a GVC's approach.

The third chapter will be dedicated to the Italian beer industry. It will deal the history of beer industry in Italy. The second part will focus on craft breweries activity and on the empirical analysis of four case studies based in North East Italy.

The fourth chapter will deal the history of U.S. beer industry and the recent development of craft beer industry. In the second part will be analyzed four case studies located in North Carolina.

Finally, chapter five will provide an international comparative analysis between U.S. and Italy. More specifically, it will focus on North Carolina and North East Italy craft beer industry. In this chapter will be underlined the main differences between these two markets.

CHAPTER 1:

'MICROBREWERIES:

A PHENOMENON THAT DESERVES ECONOMISTS' ATTENTION'

1.1 Introduction

In the most recent years, Italy and United States have been assisting to the rising and the establishment of a new type of business in the beer industry. Unlike other Countries, such as Germany, Belgium, and the United Kingdom, Italy and U.S. are not traditional beer producers. The Italian beer industry has always been characterized by few big plants, most of them now controlled by Multinational Corporations, and dedicated to the production of industrial beers. In the U.S., beer industry has similarly been dominated by few big companies for many decades.

Over the last few years a new movement of craft beer producers came little by little to occupy the stage on this field by producing a new type of beer in order to offer a non-standardized and industrialized product.

1.2 What does craft beer mean?

Regarding craft beer and microbreweries, the first notion to make clear is the difference between *craft* and *industrial* beers.

The main difference concerns the production process, as the latter does not undergo pasteurization which is instead implemented in the industrial beer production (figure 1.1).

Pasteurization is a thermal treatment that, by also killing most known pathogens, ensures beers

– as well as other commercial dairy products, such as milk – a long shelf life. This process also
affects another important aspect: by reducing beer flavor and aroma, it makes most industrial

beers quite similar in taste. Another fixture of industrial beer production, the filtration process, is rather rarely used to produce craft beers. During this phase, in fact, yeast particles contained in the fermenting mixture are removed.

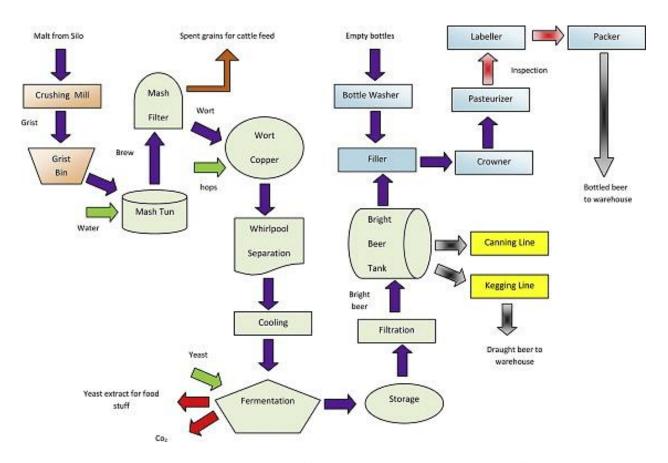


Figure 1.1: Beer production process

Source: Ghasemi-Varnamkhasti, Mohtasebi, Rodriguez-Mendez, Lozano, Razavi, Ahmadi, 2011

Both these practices make beer storable for longer, while also but damaging aroma and taste in the process. Craft beer, on the other hand, is a living product that evolves over time precisely because it contains yeast cells that feed on sugar and keep the fermentation process going. In order to freeze the process of fermentation and stabilize the product, industrial beers often contain chemical additives while craft beers contain hops and ethanol acting as natural preservatives.

The classic beer production process involves water, malt, hops and yeast. The capability of producing a high quality beer largely depends on the quality of the raw materials.

Craft beers are the result of the meticulous manual work of dedicated craftsmen who devote time and resources in order to produce high quality beers. Slowness, precision and passion for quality are the most important ingredients.

1.3 Craft beer industry: recent evolution

The term microbrewery was coined in United Kingdom around at the end of 1970s and it referred to small breweries characterized by a limited production capacity¹. CAMRA, the Campaign for Real Ale is an independent, voluntary-based organization campaigning for real ale advocating the consumer's right to *real ale* (unfiltered, unpasteurized and still active on the yeast), community pubs and quality control. CAMRA was founded in March 1971 by four men from the English North West who were disillusioned with the sheer domination of the UK beer market by a handful of companies pushing products of poor flavor and overall low quality onto the consumer.

According to CAMRA official website, "many brewers during the late 1960s and early 1970s had made the decision to move away from producing traditional, flavorsome beers which continued to ferment in the cask from which they were served, and such a move was opposed by Michael Hardman, Graham Lees, Jim Makin and Bill Mellor, all of whom thought it was

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¹ www.ezineatricles.com 'The history and the evolution of microbreweries', Emilie Chen

about time British beer drinkers were given better variety and choice at the bar"².

The aforementioned Campaign, along with the publication of *The world guide to Beer* by Michael Jackson in 1977, marked the revival of microbreweries and their spread not only in the United Kingdom, but all over the world.

CAMRA's Real Ale official definition is, "beer brewed from traditional ingredients, matured by secondary fermentation in the container from which it is dispensed, and served without the use of extraneous carbon dioxide".

After World War II, the biggest beer producers all over the world have been able to reach economies of scale, and beer has fast become a mass consumption product. This phenomenon has for many years made worldwide beer industry highly concentrated. It has been characterized by few big companies producing huge quantities of beer thanks to standardized methods and industrial techniques. In this context many small breweries were forced to close while big producers became bigger and bigger over the years. The more beer industry became concentrated in the hands of few big companies, the more small producers found space as a small niche.

As shown below (figure 1.2) from 1970 to 2010 the number of microbreweries significantly increased; it, in fact, passed from 177 to 711⁴.

Moreover, a recent article published on November 2012 on *The Telegrapgh* states that the number of microbreweries in United Kingdom has tapped 1,000⁵.

U.S. is undoubtedly one of the main protagonists of modern beer craft industry rebirth.

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² www.camra.org.uk/aboutcamra

³ www.barleysbrewing.com/real_ale.htm

⁴ www.thisismoney.co.uk 'The row brewing over a barrel of real ale', Sarah Bridge, 2010.

⁵ www.telegraph.co.uk 'Real ale revival sees most breweries in Britain since the war', 2012.

In the late 1970s, a new movement grew in the United States: a movement formed by beer enthusiasts able to produce their own beer with traditional methods, often using German and Belgian recipes.

According to Tremblay et al., the "homogenization of the beer produced by macro brewers, changes in local demand conditions, and a more favorable regulatory environment created profitable niches in many local markets for microbrewery beer, and entry into this sector occurred at a phenomenal rate from 1977 to 1998" (2005:307).

In a few decades, more than 2,000 breweries have been established in the U.S., and the number is expected to grow higher and higher in the next years.

In the late 1980s, about a decade later, a similar movement began to grow in Italy. The lack of beers on the market with different variations in taste pushed small beer producers to the establishment of new businesses.

From the beginning of 1990s up to 2012, in Italy saw the rise of more than 500 microbreweries, which produce more than 2,600 different types of beers⁶.

As already happened in other Countries, Italian beer industry has become highly fragmented if compared with only fifteen years ago.

In addition, it has become extremely internationalized and most of the Italian plants have been acquired or absorbed by foreign Multinational Corporations.

Today, beer market is split in two groups: big companies producing huge quantities of industrial beer on one side, and small breweries which produce tiny quantities of craft beer on the other. These new types of beer can be safely defined as new products, because they were not available on the market before the establishment of these new breweries.

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⁶ www.microbirrifici.org

Figure 1.2: Number of UK breweries from 1970 up to 2010

Source: thisismoney.co.uk⁷

Unlike wine, beer is not closely connected with the territory where it is produced. As it will be explained in detail in the next chapters, most of the raw materials used during the production process are imported.

Despite that, manufactures want to make their products more rooted in the territory by adding local raw materials during the production process, and enhancing the peculiarities of the area where beer is produced. Very often labels and logos are carefully designed in order to make the origin of the product recognizable.

However, an aspect shared by both wine and craft beer is their relationships with food. Craft beer is not just a drink. Often on beer labels producers advertise food that can be enjoyed along

 $^{^7\} www.this is money.co.uk/money/news/article-1694696/The-row-brewing-over-a-barrel-of-real\ ale.htm$

with their beer. It is very often local food, and it emphasizes even more the bond that producers are trying to create between product and territory.

1.4 From concentration to fragmentation

The recent craft beer industry development affected the entire beer industry. It started as a social movement but it became soon a real economic business, able to provide consumers a new product and establish new organizational forms within the beer industry.

Rao, Morrill, and Zeld "conceptualize the construction of new organizational forms as a political process in which social movements play a double-edge role: they de-institutionalize existing beliefs, norms and value embodied in extant forms, and establish new forms that instantiate new beliefs, norms and values" (2000:240).

One of the main obstacles small producers faced was entering in a mature industry and obtaining legitimacy. They tried to look for opportunities even if the industry was dominated by large companies. According to Rao et al. (2000), often social movements can exploit new opportunities that rise from market failures.

Swaminthan and Wade argue (2001) that new opportunity structures allow for social movement establishment and, at the same time, new environmental opportunity structures favor the creation of new organizational forms in market niche. In addition, they emphasize the importance of demand evolution, technological development, and institutional discontinuities as some of the main factors allowing for the success of new organizational forms.

Carroll and Swaminthan argue that "as with social movements, identity is used both to educate and to challenge mainstream consumers' perceptions of beer as a product and to criticize the values and practices of the dominant generalists firms and deviant specialist firms" (2000:730).

In the last years, have developed two main theories regarding the establishment of specialist firms in mature industries: the niche formation argument and the resource partitioning model.

Both of them have been argued by Swaminthan (1998) and used to explain the establishment of microbreweries in U.S. and the following changes in the U.S. brewing industry.

The niche formation argument supports that the entry of new firms in a mature industry is caused by exogenous forces that are external to the industry. These factors can be seen as discontinuities and they concern mostly both technological and changes of consumers demand. The niche formation argument stresses the importance of the entrepreneur capabilities in the process of market niche formation. In particular, great importance is assigned to the capability of responding to the needs of new niches of consumers (Swaminthan, 1998).

It is clear that consumers' preferences are probably the most important exogenous factor leading the rise of new businesses and entrepreneurship activities. At the same time entrepreneurs can act as forerunners and drive consumers' preferences.

As written by a well-known microbrewer: "Industrial beer became a blight on the beer world and almost eliminated all varieties of competition. Worse, the industrial brewing establishment took to brewing even paler, even more tasteless beers. [...] Today's craft brewing movement is a reaction against that mongrelization of beer" (Eckhardt, 1995:35).

Carroll and Swaminthan (2000) state that consumers started asking for new products characterized by more taste and that this encouraged the establishment of craft breweries and the spread of differentiated types of beers.

Not only consumers' preferences, but also technological discontinuities have to be considered as an important exogenous factor encouraging new niche creation.

Delacroix and Solt state that: "A new niche may become available for a given type of organization with the advent of new technologies to perform old tasks, with the opening of new environmental resource hitherto not accessible for tapping, or the emergence of new ways

to obtain resources from the environment on the basis of unchanged technology" (1988: 54).

Another key factor is the possibility for microbreweries of taking advantage of new communication technologies. Globalization phenomenon and spread of communication tools gave craft brewers the possibility to advertise and sell their products all over the world, avoiding traditional distribution channels, often monopolized by large companies.

The other theory used to explain the new niche phenomenon is the resource-partitioning argument. According to Carroll and Swaminthan (2000), Carrol's (1958) suppositions about craft breweries phenomenon have been shaped by the resource-partitioning model.

At the bottom of this model there is the analysis of the industry's dynamics. This model sets that the possibility for new firms of entering in a mature market is caused by endogenous factors.

As stated by Swaminthan, "according to the resource-partitioning model, as industries mature they come to be dominated by a few generalist firms. Generalist firms attempt to maximize their performance by drawing on the largest possible resource space, the center of the market. This opens up a pocket of resources on the periphery of the market" (1998:390).

Is therefore evident that, according to this theory, the higher is the concentration degree of an industry, the higher is the possibility to find niche firms in that industry.

One of the aspects underlined by this model is the absence of competition between generalists and specialists. Even if they belong to the same industry they have different targets, goals, ways to advertise their products, and distribution channels.

This characterized also craft beers and industrial beer industries. Although they both produce beer, their products and they production processes are such different that they cannot be considered as real competitors.

1.5 Main factors that allowed craft beer success

The following paragraphs will address the main factors and dynamics allowing the recent and fast evolution of craft beer industry.

1.5.1 New demand

One of the most important factors is the recent demand evolution.

Despite initial difficulties due to the entrance in a mature and concentrated industry, craft brewers had to satisfy the demand of a group of consumers, which were tired of standardized products market was used to offer them and which were looking for unique and differentiated products.

Craft brewer as new entrepreneurial figure is fundamental to understand dynamics and factors that have promoted the establishment of microbreweries. The ability of these crafters to understand and sometimes create new consumers' needs is the result of a new demand trend characterizing not only brewer industry but also lots of other industries.

In an increasingly globalized world this new demand trend favors craft, unique and nonstandardized products, and craft beer industry can be considered one of the most evident examples of these new customers' requirements.

Social movements are often the result of market failures (Rao, Morrill and Zald, 2000). Traditional beer market has not been able to satisfy those consumers' requirements.

In the last decades consumers have been offered standardized and industrialized products to result from a worldwide globalization phenomenon. The new demand trend is made up of consumers looking for genuine, craft, personalized, and high quality products. Craft beer industry has been able to provide both food security and meet a growing demand of differentiated products.

Craft brewers movement has been able to draw the attention of consumers and create at the same time even stronger demand of craft beer.

Microbrewery movement as a social and cultural movement created a tightly interconnected and very effective network of both producers and consumers. Taking advantage of new technologies, as well as traditional market gatherings, they exchange information through blogs, websites, and fairs. Producer aims at educating customers by explaining them how the beer is produced, what kind of methods are implemented during this production process, why craft beer is different from the industrial one. They created a community open to all those who want to experience a new type of product and learn more about it.

Carroll and Swaminthan argue that "consumers buying specialty beers seek simply a beverage brewed in a small craftlike firm according to traditional methods and using natural ingredients" (2000:728-729).

It also appears clear that there is more to the craft beer movement, from the consumers' point of view: it seems, in fact, that new demand requirements not only concern product characteristics but also the organizational form of the company.

More interestingly still, according to Carroll and Swaminthan (2000) organizational form identity seems to be more important than product characteristics. They provide different speculations to explain why:

- consumers might trust small firms over large companies to be able to provide higher
 quality products than the ones produced big companies;
- by purchasing products realized following classic methods and craft processes,
 consumers may be reacting against mass consumption trends and industrial-scale
 production techniques adopted by Multinational Corporations
- consumers may be encouraged to buy craft products to enact a form of self-expression

"consumers may be using specialty brewing as a forum for status generation"
 (2000:730).

1.5.2 Access to equipment and technologies

Although it has been always considered a low-tech industry, in the last decades the agri-food industry has been characterized by innovation and development due to new technologies and IT diffusion. Sarkar and Costa state that "the food processing industry is typically described as a relatively mature and slow- growing area of business, which displays a relatively low level of R&D investment and it is quite conservative in the type of innovations it introduces to the market" (2008:575).

In the last two centuries, however, beer industry growth has been helped by several and important innovations and technological development.

In particular, as underlined by Poelmans and Swinnen (2011), among innovations that characterized beer industry in eighteenth and nineteenth centuries, two can be considered fundamental: the improvement of state engine and the discovery of refrigeration techniques. The first made it possible to use more complicated machineries during the production process; the refrigerators' spread (1876) could provide beer availability for consumption all year round, and not only in winter – as it had up until then, winter being the only source of natural ice in lower altitudes – thus opening the wholly new and profitable possibility of beer production during the year.

Technological improvements and new communication technologies played a key role in reducing commercial and coordination costs necessary to reach markets.

Not only in the agri-food one, but in many other industries, the need of escape from industrial and standardized products is palpable, along with the consumers' urge to buy something

different, unique and personal. It seems to be a rising necessity of producers and consumers at the same time. Innovations and new technologies allowed not only the development and the upgrading of companies already existing on the market, but together with a new demand, helped pave the way for the establishment of new and unexpected movements.

The access to new technologies and changes in consumers demand are the starting point to understand how these new movements have been able to rise and create a new idea of entrepreneur and product. Technology has become the tool to realize the own beer and spread a new labor culture. The possibility by small beer producers to access the technologies needed for the production has been a key factor in the rise and evolution of the entire industry.

The relatively small size of the new brewing kits has firstly allowed them to brew their own beer at home (figure 1.3). Secondly, this practice gave brewers the opportunity to experiment the production of new types of beer at first hand, making it natural, for some of them, to go to the next level and turn their passion into an actual job and start up an actual business.

Recent technological developments allowed microbreweries access the same technology used by big corporations, but on smaller scale. There have been changes technologies became much easier and more affordable (figure 1.4).

Some of the most important changes have occurred packaging choices, due to a higher affordability. Selling beer in a can, in particular, has become less expensive for small breweries, while just years ago only big companies could afford it. The emergence and rising of microbreweries created a market for contractors and companies providing beer production plants, and the market for this technology is going to grow together with demand growth.

Also, as a result, the more the demand grows the more efforts and funds are put into this field of research, the more efficient and specific this technology becomes.

Figure 1.3: Beer making kit



Source: beerstreetjournal.com⁸

Figure 1.4: Basic equipment of a microbrewery



Source: nealhknapp.com⁹

 $^{^8}$ www.beerstreetjournal.com/williams-sonoma-offers-home-brew-kits/ws-beer-kit/ 9 www.nealhknapp.com/Microbrewery-Equipment/Microbrewery-Plants.aspx

1.5.3 New forms of distribution and advertising

Distribution channels used by microbreweries and industrial producers are often extremely different.

In the beer market big supermarket chains and shipping companies are controlled by huge Multinational Corporations and craft beer producers do not have easy access to traditional distribution channels.

This is particularly evident in Italy, where is rather rare to find craft beers in either grocery stores or big food wholesalers. Partly as a result of this as well as a marketing strategy, small breweries' privileged distribution channel is the direct sale, and craft beers are often sold on the production site. In addition, many brewers manage their own restaurant or brewpub near or inside the brewery site, and use them to both advertise and sell their products.

At the outset level, small breweries in the U.S. used to start with self-distribution because their production level did not allow them to cover distribution costs. Once they became bigger and their production volume grew too committed to large distributors. The relationship between small breweries and distributors has proven fundamental along the value chain. Brewers are used to rely on few large distributors and they establish with them stable relationships.

In Italy, the development of the craft beer industry is a more recent phenomenon, and craft beers are not yet available in supermarket. In the U.S., on the other hand, consumers can buy craft beers in most grocery stores.

Even if large distributors have a key role in the value chain, brewers still try to control distribution and retail activity. As previously discussed, one of the main differences between craft and industrial beer concerns the preservation method: craft beers are alive products and free of additives that ensure a long shelf life. For this reason they must be properly stored and consumed within a fairly close expiration date. This led to more complex relationships with retailers, having to educate them to more delicate storage rules for their product. That is why,

especially at the beginning, producers tended to carefully select which retailers and stores are more likely to sell their products the way it is intended to be.

With regard to advertising, small producers do not have access to television commercials, for a sheer matter of costs. Then again: as craft brewers wish to keep their beers as local as possible, they do help organize local events and fairs to promote their beer and give consumers the chance to taste them.

These gatherings serve many purposes. One of them is to educate consumers. Since craft beers tend to have a strong flavor, consumers need to learn to appreciate them in all their complexities, layer by layer. Therefore, it is very important that they understand how beer is produced and which ingredients are used to obtain it.

1.5.4 A new entrepreneurial figure

According to Fritz Maytag of Anchor Brewing in San Francisco, one of the pioneers of craft beer production movement, "the reason that the whole micro-brewing renaissance has succeeded is that the early pioneers were interested in making beer. People were in love with the idea of brewing beer. That has been a fantastic source of energy and has fueled public approval of our movement" (1996:22).

These words emphasize the process that led passionate beer drinkers to become real entrepreneurs. They were consumers that became entrepreneurs as a reaction against industrial beer. Aiming first and foremost at defending beer quality, they have since triggered a revolution. In a constant movement from individual needs and crafts to a network-based, community-oriented entrepreneurial effort, most of them started producing beer on their own, only later feeling the need to open a brewery.

It is interesting to notice how this social movement established by consumers created a new entrepreneurial class set up by those same consumers that started the movement. Being consumers first, and entrepreneurs later, gave them a deeper and better understanding consumers' needs and how to satisfy them.

The single most important factor that contributed to the success of this movement is craft brewers' passion. Along with it, their creativity and determination gave them the insight to exploit a market gap, sometimes being the mere absence of craft beer supply, in their regions and Countries. They have managed to fill that gap, enter this market as full-time players, often going as far as being a perceivable challenge for Multinational Corporations. Despite their initial difficulties, these entrepreneurs came to face a large demand.

Behind each craft beer stands the story of its producer, his careful selection of first quality raw materials, and, last but not least, his own tastes and preferences. Each beer comes from the creativity of its craft brewer and each beer is different from all the others the same way as each producer is different from all others.

Regarding craft breweries characteristics, Rao and Giorgi argue that "as a craft movement, then, the micro-breweries were by definition, less about scale and more an expression of a new identity. The identity of microbreweries was premised on small scale, authentic and traditional methods of production, and fresh beer with a myriad of tastes (2006:284).

CHAPTER 2:

'THEORETICAL BACKGROUND.

ENTREPRENEURSHIP: A NEW APPROACH'

2.1 Entrepreneurship and network-based research

Over the last fifteen years, scholars researching in entrepreneurship have largely focused on the link between network and small and medium-sized firms' growth. Instead of depicting entrepreneurs as isolated actors, scholars started studying the relationships between entrepreneurs and the other actors within the network, especially in the early stages of the firm development. Precisely, Entrepreneurship Theory has devoted significant attention to issues pertaining network organization, in terms of structure and inter-firm coordination (Hite, 2005; Slotte-Kock and Coviello, 2010; Szarka, 1990; Thompson, 2003; Van Laere and Heene, 2003). According to Thompson, "networks have proved a useful alternative conception in analyzing how a range social activity is organized and governed at a number of levels" (2003:29). Over the last years, scholars provided several definitions in order to explain what a network is from the SMEs' point of view. Melin (1987) defines networks as the set of relationships among both individuals and organizations. Scott (1985) underlined the importance of the interactions between organizations in small firms network research. This is due to the fact that in small businesses firm is often identify with the owner, and vice versa. Johannisson (1987) postulated three types of small firms networks. The first is defined production network and it concerns commercial relationships; the second one is the personal network which involved relationships based on trust; the third is the symbolic network and implies ties with the community based on common values.

As argued by Hoang and Antoncic (2003), network is an invaluable source of resources and opportunities for small firms. Havnes and Senneseth, (2001) emphasize the importance of network for small and medium size firms in allowing their surviving and growth.

Small firms, in fact, often lack of capabilities and necessary capital to acquire the needed resources. Especially, they lack economies of scale, management resources, and control of distribution channels (Van Laere and Henee, 2003). According to Szarka, "networking is particularly valuable to the small business sector since the fragility which accompanies small size firms can be off-set by the supportive environment provided by resilient networks" (1990:10). Networks represent an effective way to access both tangible and intangible resources; they provide entrepreneurs advices and information (Elfring and Hulsink, 2003; Hoang and Antoncic, 2003) and play a key role in enhancing the set-up of a firm and its growing process (Larson and Starr, 1993; Hite and Hesterly, 2001). "Networking" is therefore a strategic process through which entrepreneurs can obtain resources which are "external" to the boundaries of the firm. The process of resource exchange often occurs through the management of personal relationships (Jarillo, 1989). Typically, connections between pairs of actors within the network are called ties. Quantity, quality, and type of interactions affect network characteristics (Thorelli, 1986). These ties connect the firm with its partners and allow the establishment of both competitive and cooperative relationships (Gulati, Norhia and Zaheer, 2000). Havnes and Senneseth argue that "relationships may simbolize channels for ditribution of materials, goods or information, power of influence structures, elements of processes, etc."(2001: 293). Through the cooperation with other firms, small businesses acquire new competencies, discover new investments opportunities, access easily to new markets, and share risks with other actors (Van Laere and Hene, 2003).

In 1999, Gulati introduced the concept of network firm resources. Precisely, he argues that the set of resources that firms require in a specific moment will determine the type of network

connections they will establish. He, in fact, states that the more new inter-firm relationships within the network rise, the more they increase the creation of new resources and opportunities (Gulati, 1999).

Relationships and connections with other actors provide entrepreneurs the resources to initiate their business and grow over the time. However, the management of these relationships requires distinct capabilities. First, firms must identify right partners, develop negotiations and contract skills (Gulati, Nohria, and Zaheer, 2000). These relationships appear to become more and more strategic when firms move from a start-up to a growth phase (Macpherson and Holt, 2007).

According to Hoang and Antoncic, "the reliance on network is not constrained to the start-up stage. Entrepreneurs continue to rely on networks for business information, advice, and problem solving, with some contacts providing multiple resources" (2003:166). As emphasized by Shumpeter (1934) and Penrose (1959), entrepreneurs ability regards especially their capability of perceive new opportunities and acquire advantages through them. Moreover, Szarka (1990) argues that networking practices allow entrepreneurs to concentrate their efforts and specialize on their core businesses and gain competitive advantages. He also states that "increasing specialization in small market niches has tended to encourage inter-dependency between firms in the value added-chain" (1990:16). Small firms growing process is therefore correlated with entrepreneurs capability to acquire resources; the failure in accessing and managing of these resources may limit their ability to growth (Macpherson and Holt, 2007). Because the study discussed here will focus on the early evolution of craft breweries, a dynamic approach will be necessary. Hite and Hesterly argue that "this dynamic nature of firm resource needs suggests that a more dynamic approach to understand firm's network is required" (2001:276).

Moreover, this research pays attention to dynamics that determine the network evolution over the time. Networks, in fact, tend to be dynamic phenomenon and are continuously shaped from both exogenous and endogenous factors (Gulati, Nohria, and Zaheer, 2000). Networks are subjected to the influence of both external and internal forces that determine changes over time. Firms' requirements and resources change in the course of time; network relationships and their coordination models constantly evolve. The continual evolution of historical experiences and social environments affects the form assumed by businesses relations and make them highly variables (Perry, 1999). In their research, Hoang and Antoncic (2003) suggest that networks have to be analyzed both as an independent and a dependent variable, thus increasing the need for a dynamic perspective.

Networks cannot be studied as a static phenomenon, but as a dynamic framework in which entrepreneurial actions impact on them, and, at the same time, network developments creates new entrepreneurial opportunities (Hoang and Antoncic, 2003; Borgatti and Foster's, 2003). In addition, networks boundaries are not given and permanent. Thompson argues that "network is both structured and restructured at the same time. Thus, the network here is conceived as a dynamic multidimensional bounded structure" (2003:232).

The need for a dynamic perspective leads to the consideration of the Global Value Chain model.

The following paragraph will address this theoretical framework

2.2 GVCs approach

Network theory is a wide field of study and incorporates many definition and explanations of what a network is. In this research, the case analysis will be conducted adopting the global value chain analysis. The analytic pattern approach will allow to narrow down the network and

to concentrate on specific relationships along the value chain. It will also provide a dynamic vision of the relationships' development between and within the actors of the value chain, which is useful to better understand small firms' growing process.

Sturgeon proposes the value chain definition "to denote a particular, product-based thread of activity that, at a given moment in time, runs through a larger constellation of activities and dynamic configurations embodied in a production network" (2001:6).

This research will provide a value chain analysis of eight case studies in order to focus our attention on specific ties within the network. Value chain analysis will represent the tool through which investigate craft beer industry establishment and development.

According to Sturgeon, this analysis allows "the distillation of the essential steps taken to get a particular product to market. Within such a snapshot the concrete activities of the key players can be made extremely clear" (2001:6). Global value chain analysis enables to shift the focus from the single firm to the interconnections between many firms belonging to the same chain. By focusing on the relationships within the chain, this analysis pattern identifies the most profitable activities and the best way to manage them. Moreover, this study will investigate the types of governance that emerge along the value chain and how entrepreneurs manage both core and non-core businesses and how they changed in relation to firms' requirements and needs. As stated by Gereffi et al. "the doctrine of 'core competence' takes this a step further, arguing that firms which rely on the complementary competencies of other firms and focus more intensively on their own areas of competence will perform better than firms that are vertically integrated or incoherently diversified" (2005: 81).

According to Gereffi et al. (2005), the global value chain approach focuses on relationships between buyers and the first-tier suppliers. It, in fact, emphasizes the nature of these relationships and the factors that determine the value chain coordination model.

On the base of the degree of three specific factors: complexities of information required in a transaction, facility of codify and transmit this information, and suppliers' capabilities, Gereffi, Humphrey and Sturgeon (2005) identifies five types of value chain governance (figure 2.1):

Figure 2.1: Features of GVC type of governance

Governance Type	Complexity of transactions	Ability to codify transactions	Capabilities in the supply- base	Degree of explicit coordination and power asymmetry
Market	Low	High	High	Low
Modular	High	High	High	
Relational	High	Low	High	
Captive	High	High	Low	
Hierarchy	High	Low	Low	∀ High

Source: Gereffi, Humphrey and Sturgeon (2005)

- market: it is characterized by low complexity of information exchanged, codified transactions, and suppliers who have the capabilities to replicate products. This governance implies low switching costs for both buyers and suppliers;
- modular: in this governance the degree of explicit coordination tends to increase. It is
 characterized by a major products complexity and codified knowledge. In addition the
 exchange of information is not limited to price;
- *relational*: in this type of governance there is a mutual dependence between buyer and supplier; it can be regulated through reputation, social and spatial proximity. Relational governance regards complex transactions, low ability to codify them, and high capabilities suppliers;
- *captive*: in this case supplier are highly dependent on the lead firm. Captive governance is characterized by high complexity of transactions, high ability to codify transactions, and high capabilities suppliers;
- hierarchy: it is characterized by a vertical integration structure, high complexity of
 transactions, low ability to codify transactions, and low capabilities suppliers. Because
 of the high complexity of transactions, the low ability to codify transactions, and the
 low suppliers' capabilities, the lead firm decides to internalize its activities.

Governance is a key concept to the value chain analysis (Gereffi, Humprey, Kaplinsky, and Sturgeon, 2001).

According to Gereffi et al., "governance involves the ability of one firm in the chain to influence or determine the activities of other firms in the chain. This influence can extend to defining the products to be produced by suppliers (in extreme cases not only the direct suppliers, but also the suppliers' suppliers) and specifying processes and standards to be used"

(2001:5).

This approach will permit to better comprehend craft beer industry framework and it will provide the opportunity to map and analyze all the activities involved in the production of craft beer.

The analysis will take into consideration all the production steps, from purchasing, to production, distribution, and final market. In addition, the case studies analysis will emphasize how entrepreneurs can improve their economic performances and how firms' growth affects both relationships development and value chain governance.

CHAPTER 3:

'THE ITALIAN BEER INDUSTRY'

3.1 Italian beer industry: rise and development

For many centuries, at least since Roman times, wine has been the most popular alcoholic beverage in Italy. Unlike other European Countries, especially Belgium, Germany, and the United Kingdom, Italy does not have a long tradition as beer producer. During the Middle Ages, some Italian monasteries used to produce beer with craft methods and it was just here that hops were used to produce beer for the first time. However, only few connoisseurs knew of and appreciated it and its diffusion was opposed and delayed largely due to the overwhelming power of the wine tradition.

Owned by foreign entrepreneurs, the first beer production plants were opened around the midnineteenth century. Beer producers like Whurer, Dreher, Paskowski, Metzger, and Caractch decided to move part of their production in Italy to try and break in the almost beer-less Italian market. Many of the major factories were located in northern Italy. Due to its proximity to Austria and Germany, traditionally among the strongest beer hubs in Europe, this area was already characterized by higher consumption of beer, particularly if compared with the south and the center of the Country.

In 1890, in Italy, there were 140 production units, which produced around 161,000 hectoliters of beer. In 1910 that number increased up to 598,316¹⁰.

In twenty years, the total amount of beer produced had increased to a fourfold, and finally, in 1907, was founded the Beer Industries Union¹¹.

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 $^{^{10}\} www.mondobirra.org/storiaitaliana.htm$

¹¹ www.birragustonaturale.it

During the two World Wars, beer production was almost arrested and beer consumptions decreased exponentially.

As documented by Poelmans and Swinnen (2011), this negative trend affects not only Italy: between 1915 and 1950 beer production largely decreased in most European Countries. In particular it decreased by around 70% during World War I._In addition, the authors argue that "the brewing industry suffered greatly, particularly in the occupied parts of Europe (e.g. Belgium and France). The mobilization caused many workers in the brewing industry to be scattered, which led to a shortage of employees in the breweries. Moreover, metal materials (such as copper), vehicles and draught animals were claimed by the occupying forces. As a consequence, a lot of breweries had to close down their businesses". (2011:10).

Since the 1960s, Italy experienced an exceptional economic growth that also affected beer industry. Thanks to the spread of refrigerators first in pubs and then in private homes, beer became a large consumption drink, even if it was still considered a seasonal drink. In these years distribution played a key role. It became more and more widespread and it allowed beer to reach supermarkets, shops and megastores.

In the early 1970s the total amount of beer produced reached eight million hectoliters¹².

From the 1980s up until now, beer consumption grew steadily year by year, while from 1975 up to 2008 both wine and hard liquors consumption decreased significantly (figure 3.1).

Today, about 18 industrial units are present in the Italian territory, and they are almost entirely in the hands of large international groups¹³.

According to Garavaglia (2010), in Italy, over the last decades, the offer has experienced an increasing level of market concentration and internalization degree, as it happened in other industrialized Countries.

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¹² www.mondobirra.org/storiaitaliana.htm

¹³ www.mondobirra.org/storiaitaliana.htm

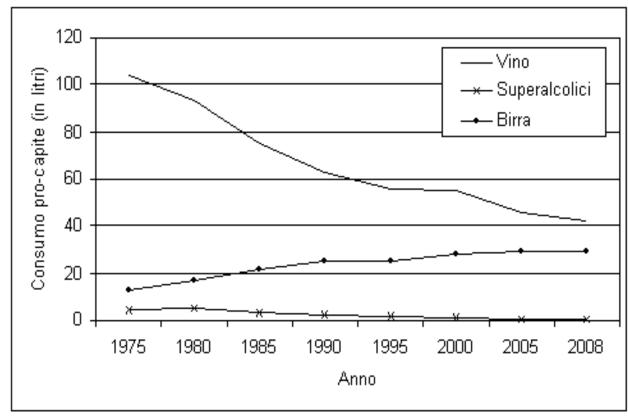


Figure 3.1: Beer, wine and hard drink consumption in Italy from 1975 to 2008.

Source: agriregionieuropa.univpm.it¹⁴

3.2 Main economic trends over the last ten years

As showed in table 3.1, production, consumption, exports, and imports have slowly grown since 2001. In 2011 and 2012, on the other hand, the industry reached significant results. In particular, the best performances have been recorded in the export sector, which has rapidly grown from 2007. These data clearly show that over the last five years, Italian beers gained a great success among foreign beer consumers.

 $^{^{14}\} www.agriregionieuropa.univpm.it/stampaarticolo.php?tipo=0\&id_articolo=588$

Production trend has been characterized by a slow growth between 2001 and 2010, but in 2011 the amount of beer produced increased significantly.

Between 2001 and 2011 imports have constantly grown, with the exception for 2008 and 2009.

These negative results can be explained by the side-effect of the global economic and financial crisis that affected not only beer industry but the whole Italian economy.

Finally, consumption registered a positive trend in 2010 and 2011.

According to this data, it can be assumed that Italian beer industry is still a growing sector, but the positive trends that characterized the last few years showed that it is little by little gaining success.

Table 3.1: Market trend of the Italian beer industry, 2001-2011 (hl)

Year	Production	Import	Export	Consumption
2001	12.782	4.414	502	16.694
2002	12.592	4.437	689	16.340
2003	13.673	4.664	884	17.453
2004	13.170	4.873	849	17.194
2005	12.798	5.258	781	17.340
2006	12.818	5.814	781	17.851
2007	13.462	6.119	1.068	18.513
2008	13.343	5.996	1.503	17.836
2009	12.776	5.822	1.743	16.855
2010	12.814	6.304	1869	17.249
2011	13.410	6.391	2.086	17.715

Source: Assobirra 2011 annual report

Table 3.2: 2011 market shares of domestic beers

Heineken Italia Spa	40.5%
Birra Peroni Srl	24.5%
ABI InBev Italia Spa	10%
Carlsberg Italia Spa	7.9%
Birra Castello Spa	6.8%
Birra Forst Spa	4.6%
Birra Menabrea Spa	1.4%
Hausbrandt Trieste Spa	0.13%
No members breweries and microbreweries	3.8%

Source: Assobirra 2011 annual report

3.2.1 2011 Production and Consumption

According to 2011 AssoBirra annual report (AssoBirra is the Italian Association of Beer and Malt Manufacturers - that represents most of industrial beer producers) in 2011, after several years characterized by modest economic performances, both production and consumption significantly increased.

Production increased by 4.7% compared with 2010. In 2010 beer production volume was around 12,814,000 hectoliters, while in 2011 the total amount of beer produced, by both industrial and craft breweries, reached 13,410,000 hectoliters. It represents the second best result ever realized (the best ever being in 2007 with 13,461,000 hectoliters).

The total amount of 2011 Italian beer consumption was around 17,715,000 hectoliters of beer (29 liters per capita). It has increased by 1.4% compared to 2010 and 3.6% compared to 2009. The main beer suppliers are represented by Heineken Italia S.p.A. and Birra Peroni s.r.l., which hold the 65% of the market share (table 3.2). And If we also consider AB InBev Italia Spa and Carlsberg Italia Spa, these four groups together hold almost the 85% of the entire beer market. These data clearly demonstrate that beer industry is highly concentrated and dominated by few big Multinational Corporations.

3.2.2 2011 Import and Export

In 2011, the Italian beer industry exported 2,086,000 hectoliters of beer, + 11.6% compared to 2010, which represents an all-time record.

As shown in table 3.3, the main user market of Italian beers is represented by Great Britain.

Table 3.3: 2011 Italian beer export-most significant Countries

Country	Percentage of beer exported
Great Britain	60%
United States	9%
South Africa	6.3%
France	4.4%

Source: Assobirra 2011 annual report

Imports in 2011 have also scored record values, thanks to 6,391,000 hectoliters of beer imported. The total amount of beer imported in 2011 increased by 1.4% compared to 2010. The 97% of total import come from European Countries.

The major importing Countries are listed in table 3.4:

Table 3.4: 2011 Italian beer import-most significant Countries

Country	Percentage of beer imported
Germany	53%
Netherlands	11%
Belgium/Luxemburg	7%
Danmark	6%

Source: Assobirra 2011 annual report

3.3 Historic plants

As shown above (figure 3.2), Italy has today few big plants that produce industrial beers and hold most of the market share. The majority of these beers gained success and popularity thanks to big advertising campaigns, which made them famous and appreciated not only in Italy, but all over the world.

UNITÀ PRODUTTIVE DISLOCATE SUL TERRITORIO NAZIONALE BREWERIES IN ITALY LOMBARDIA Carlsberg Italia, Induno Olona (VA) Heineken Italia Spa, Comun Nuovo (BG) TRENTINO ALTO ADIGE Birra Forst Spa, Lagundo (BZ) VALLE D'AOSTA FRIULI-VENEZIA GIULIA Heineken Italia Spa Castello di Udine Spa, S. Giorgio Nogaro (UD) Pollein (AO) **VENETO** Pedavena (BL) Spa Birra Peroni, Padova PIEMONTE Hausbrandt Trieste 1892 Spa, Treviso Birra Menabrea Spa, Biella LAZIO Spa Birra Peroni, Roma PUGLIA Carlsberg Italia Spa, Ceccano (FR) Heineken Italia Spa, Massafra (TA) Saplo Spa, Pomezia (RM)* Spa Birra Peroni, Bari CAMPANIA Spa Birra Peroni, Napoli BASILICATA Tarricone Spa, Baragiano (PZ) SARDEGNA Agro Alimentare Sud Spa, Melfi (PZ)* Heineken Italia Spa, Assemini (CA) SICILIA Heineken Italia Spa, Messina * Stabilimento maltario Malthouse

Figure 3.2: Location of the main Italian plants

Source: mondobirra.org¹⁵

Most of them are produced in plants spread on the entire peninsula and established in the last century. Even if they represent the history of Italian beer, most of these plants are currently

 $^{^{15}\} www.mondobirra.org/download/produitalia.jpg$

controlled by foreign companies and in most cases they are owned by a sole Multinational Corporation.

The following paragraphs will give a brief description of some of the most important Italian brands.

3.3.1 Birra Peroni

Peroni Group represents one of the most important players in the Italian beer industry. It was founded in 1846 by Giovanni Peroni. At the beginning the plant was opened in Vigevano. In 1864, Peroni decided to establish a second plant in Rome¹⁶.

After hard times, caused by World War I and II, in 1963 Peroni created a new label: Nastro Azzurro. This new label allowed Peroni Group to reach international markets and export its beers all over the world. Nastro Azzurro is still one the most exported and popular Italian beers.

Since 2003, Peroni is controlled by the South African group SABMiller, which acquired the majority of shares. Despite this, Peroni Group still remains one of the most important beer producers in Italy. It owns three big plants (Rome, Padua, and Bari) which account for 750 employers and 3.250 hectoliters of beer produced every year¹⁷.

3.3.2 Birra Moretti

The first plant was founded in 1959 by Luigi Moretti in Udine, Friuli Venezia Giulia. This area of the Country still represents the region where most of Italian, and not only Italian, beers were born and produced (Dormish, Dreher, Pittini, Pedavena, Castello)¹⁸.

¹⁶ www.birraperoni.it/azienda/storia.php

www.fermentobirra.com/la-birra-italiana/birra-peroni-la-storia/

¹⁸ www.mrbeer.it/2010/10/storia-della-birra-in-friuli/

As others firms, Birra Moretti has faced a rapid growth during the first years of the twentieth century and a period of crisis during the two World Wars.

During the 1960s and 1970s both Moretti and Peroni invested a large amount of money and resources in advertising, creating images and commercials still very much part of Italian popular culture.

In 1989 the property was sold to the Canadian Labatt; in 1995 Labatt handed over the property to the Belgian Interbrew.

Finally, in 1996 Birra Moretti was acquired by Heineken, which still controls it.

Recently the company has added a new beer to the product range: Moretti Grand Cru¹⁹.

This beer is produced following production processes close to the ones adopted in craft beer industry. Lately, not only Moretti, but also other big brands, have attempted to increase the quality of their products trying to assimilate them to craft beers produced by small breweries.

3.3.3 Birra Menabrea

The company was founded in 1846 in Biella by the families Welf and Caraccio. They founded a sort of laboratory with the aim to tap the pure water flowing from Orapa Mountains in order to produce high quality beer.

Afterwards, they gave the property up to Jean Joseph Menabrea and Antonio Zimmermann. In 1972 the Menabrea family became the only owner of the company. In 1896 the company was managed by the Menabrea family in conjunction with the Thedy family (still now part of the management)²⁰.

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¹⁹ www.birramoretti.it/birra-moretti-grand-cru.htm

²⁰ www.birramenabrea.com/lo-stabilimento/la-storia

During the twentieth century, the volume of beer produced increased from 8,000/10,000 hectoliters to 100,000 hectoliters²¹. This increase in production gave Menabrea the possibility to move up from a provincial dimension.

In 1991 Menabrea has been absorbed by Forst Group, but it has managed to hold on to its identity and its independence.

As well as Birra Moretti, also Menabrea too has recently enlarged its products range including new types of beer called Top Restaurant. This new product line has been developed to offer real ales to be accompanied to high-end food. Both brands, Moretti and Menabrea, decided to insert high quality beers in their production – thus using a production process different from their usual industrial products – in order to compete against craft breweries and attract quality-conscious niches of consumers.

3.3.4 Birra Castello

Birra Castello is undoubtedly the youngest among Italian beer. Even if it has not a long tradition and a long background, it has quickly acquired great success among beer consumers. Birra Castello S.p.A. was founded in 1997 near Udine – also in Friuli-Venezia Giulia, and the existing plant²², previously property of Heineken, was ceded to local entrepreneurs that relaunched it. Birra Castello is today the only Moretti label that has not been sold to Heineken. Birra Castello S.p.A, its subsidiary Pedavena, and Spezialbier Brauerei Forst are the only brands still managed by Italian entrepreneurs. All the other plants have been acquired or under control of Multinational Corporations.

²¹ www.fermentobirra.com/la-birra-italiana/birreria-menabrea-la-storia/

²² www.birracastello.it/azienda-castello/

3.3.5 Birra Pedavena

The first plant was opened in Pedavena, a small town near Belluno, in the North East of Veneto, in 1897.

Twenty years later, by 1920, the volume of beer produced was around 90,000 hectoliters and it was the second biggest producer of the Country²³.

After World War II the company started suffering the high competition from international companies.

In 1974 the Pedavena label was sold to Heineken, and 30 years later, in 2004, Heineken decided to close down the plant in Pedavena altogether.

Thanks to the workers and Pedavena residents' persistence, supported by local and national organizations, Heineken decided to sell the plant. In 2006 Birra Castello S.p.A. decided to take over Pedavena's plant.

3.4 Microbreweries phenomenon

In Italy, beer has always been considered as a refreshing drink, rather than a real substitute for wine. Over the years the great Italian tradition of winemaking has left little room for a massive diffusion of beer. In addition, beer has always been considered as a seasonal beverage.

As underlined above, industrial beer consumption in Italy has begun to be increase starting from the 1980s.

At the end of that decade, market offered to Italian consumers several types of industrial beers, both foreign and domestic.

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²³ www.birreriapedavena.info/?storia#risultati

The first Italian craft breweries appeared around the Mid-1990s in different areas of the Country, but most of them were concentrated in the North. Up to that time craft beer was seldom taken into consideration, although it was already widespread in other European Countries such as Germany, Belgium, and Great Britain.

Table 3.5: Number of craft breweries in Italy, 1996-2012

Year	Number of craft breweries
1996	7
1998	less than 40
2000	less than 70
2007	less than 200
2010	more than 300
2012	more than 500

Source: microbirrifici.org, ilsole24ore.com²⁴, and beercoasters.it²⁵

Table 3.5 clearly shows the rapid growth of Italian microbreweries. From 2007 to 2012, in particular, this number grew significantly, increasing from less than 200 productive units, to more than 500 plants. This made Italy one of the Countries with the highest concentration of craft breweries compared with the total population.²⁶

²⁴ www.video.ilsole24ore.com/TMNews/2012/20120828_video_13324951/00005774-la-birra-artigianale-conquista-litalia-boom-di-birrifici.php

²⁵ www.beercoasters.it/ITALIAN%20MICROS.HTM

²⁶ www.ricerca.repubblica.it, 'Così la grande industria, Carlo Petrini, 2011.

Among the pioneers of craft beer movement, the most famous are Agostino Arioli and Teo Musso, which own two of the biggest and most successful microbreweries in Italy: Birrificio Italiano and Baladin.

1996 marked the turning point because it is in that time that were established the first microbreweries (most notably in Piemonte, Veneto and Lombardia).

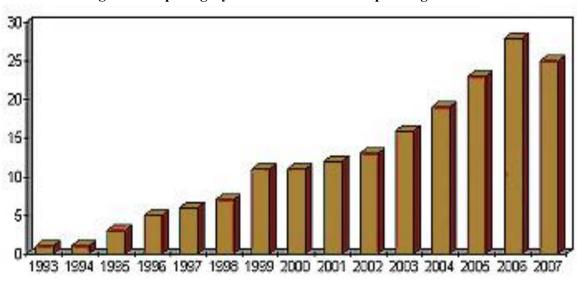


Figure 3.3: opening's year of craft breweries operating in 2007

Source: microbirrifici.org²⁷

As showed in figure 3.3, since 2000 the number of craft breweries has become increasingly more significant.

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²⁷ www.microbirrifici.org 'L'inarrestabile ascesa dei microbirrifici', Davide Bertinotti, 2008.

The rise of these microbreweries represented a big change of Italian beer industry; craft brewers launched a new product on the market. These entrepreneurs felt the need for new types of beer, different from the standardized ones produced by Multinational Corporations.

Craft beer producers often come from completely different walks of life. Pushed by their passion for beer, they reinvented themselves as brewers and entrepreneurs and have been able to spread a new beer culture among Italian consumers.

The 2008 economic and financial crisis boosted social and entrepreneurial need for new, more community-oriented companies. The new kind of business that spawns from this need has largely developed on a human scale dimension. They tried and, in most cases, succeeded, to be a key part of a social and artisanal renaissance.

Craft movement seems generated by the increasingly evident consumers' request for products meeting high quality requirements and new lifestyle values, and it not only characterized beer industry, but many other industries. Even if more expensive than industrial ones, craft beers have gained success day after day precisely because the attention and care that brewers invest into the production process is able to satisfy customer needs.

The use of first quality raw materials, the production of products expressing craft's work and creativity, the possibility of drinking different typologies of beers with different tastes and aromas, the process leading to the discovery of a new world behind a simple beer, the discovery of its story and its origins, the possibility of drinking a beer produced in a well-defined Italian area, are some of the characteristics that determined the recent growth of craft beer industry in Italy. In order to obtain differentiated products, brew masters combine traditional production processes and use of innovative raw materials.

Today, there are more than 500 microbreweries in Italy but they still hold only the 1% of the entire market share (2011 AssoBirra Rreport).

Figure 3.4 shows the location of craft breweries (red).

As we can see, they are spread over in the Italian territory. The higher concentration is in the North West (especially Piemonte and Lombardia), where, around fifteen years ago, appeared the first craft breweries. The North East Italy experienced a rapid development over the last three years, and also the center area of the Country is characterized by a significant number of breweries and brewpubs. The South, on the contrary, is the area with the lowest concentration of craft breweries. As already explained above, the South has always registered lower beer consumption than the rest of the Country.

Despite this trend, craft beer movement has reached also the South and the Islands, and has gained particular success in Sardinia, where are produced some of the most famous and popular Italian craft beers.

3.4.1 Craft beer industry in the Italian North-East

As mentioned above, craft breweries has developed and spread out much more in the North East than in the rest of the Country, especially because the proximity with Countries characterized by a long tradition as beer producers, such as Germany, Belgium, and UK, encouraged the beer consumption more in the North than in the South of Italy.

The North East of Italy is composed by four different administrative regions: East side of Lombardia, Friuli-Venezia Giulia, Trentino Alto-Adige/Sudtirol, and Veneto (figure 3.4). These four regions have in total 169 craft breweries, around one third of the total number of Italian craft breweries.

More specifically the research will focus on craft breweries located in this area of the Country.



Figure 3.4: Location of craft breweries

Source: microbirrifici.org 28

 28 www.microbirrifici.org/beer_italy_maps.aspx

As shown in table 3.6, Veneto and Lombardia have experienced a faster growth in the number of microbreweries, if compared with the other two regions. They are certainly bigger in size and more populated, but the growth rate is higher.

Many Italian regions that became famous because of their wine production (Piemonte, Lomabrdia, Veneto, Toscana...), are nowadays protagonists of the beer industry and show the higher concentration of craft breweries.

The Italian craft beer movement is still growing and the dynamics that eased its development are not yet well defined. But one of the reasons that could determine the success of these breweries is probably connected with the strong tradition of our regions as wine producers. Devotion, attention, and selection of the best raw materials are, in fact, key features the characterized both wine and craft beer production process.

Table 3.6: Number of craft breweries in North East Italy from 2008 to 2012

Region	2000	2008	2012
Veneto	4	22	40
Friuli Venezia Giulia	8	17	20
Trentino Alto adige	4	16	21
Lombardia	14	42	88
Total	30	97	169

Source: microbirrifici.org

In addition, several Italian brew masters have tried to produce beer with grapes. The result is a combination between wine and traditional beers that makes beers unique and high territorial connected products. Italy's renowned reputation as high-quality wine producers, in fact, gave Italian brewers the possibility of exploiting the "Made in Italy" brand for their beers. They often use tools and methods typical of the wine production process (e.g. the use of the same yeast as wine and champagne, the use of wood to both mature and refine beers, or the use of barrels that have contained world famous wines) and this new tendency, along with carefully selected marketing techniques, has recently determined a great success of Italian craft beers on international markets.

3.4.2 Case studies

The following paragraphs will examine four case studies based in the north East of Italy (figure 3.5).

Two of them (Morgana and 32 Via dei Birrai) are located in Veneto, in the province of Treviso; one (Valscura) is located in Friuli-Venezia Giulia; and one (BABB) is base in the East part of Lombardia, in the province of Brescia.

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Figure 3.5: Case studies location

Source: microbirrifici.org²⁹

3.4.2.1 BABB

Establishment and recent development

Babb was founded in 2004 by six partners. The brewery is located in Manerbio, a small town near Brescia (Lombardia).

BABB acronym stands for Birrificio Artigianale Bassa Bresciana and Bassa Bresciana is the name of the area where the brewery is based. Currently the brewery has one employee, the brew master, but each of the six partners effectively deal with both production and commercial activity.

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²⁹ www.microbirrifici.org/beer_italy_maps.aspx

In 2004 BABB's owners decided to open both a brewery and a restaurant, next to the plant, where sell their beers. At the beginning the entire production was shipped to the restaurant, but, starting from 2005, because of the great success and high demand, , the beer started to be sold outside the restaurant and, in 2009, the brewery and the restaurant were legally divided. As showed in table 3.7 and 3.8, from 2004 and 2011, the total sales increased by 315% while the production volume increased by 300%. The estimated 2012 production volume shows a decreased by 33%, if compared with 2011; this is due to technical problems of the plant that caused a suspension of the the production activity for more than one month.

Table 3.7: BABB total sales in 2004 and 2011

YEAR	TOTAL SALES
2004	60.000 €
2011	250.000 €

Source: author's elaboration

Table 3.8: BABB production volume in 2008, 2011, and 2012

YEAR	PRODUCTION VOLUME
2004	20.000 Lt.
2011	80.000 Lt.
2012 (estimated)	60.000 Lt.

Source: author's elaboration

Entrepreneurial motivation

As already mentioned above, the brewery was opened by six partners. Each of them had a different job but they strongly believed in the success of craft beer industry.

Even if in 2004 the number of microbreweries was significantly lower and craft beer industry was still a market niche, they believed that craft beer could become a successful product and decided to invest their money to build the brewery and the restaurant.

In addition, in 2004, one of the six partners was part of Slow Food Association, which has always been close to craft beer industry. This facilitated him and his partners to better understand this industry and its dynamics.

In one of the owners own words: "We sniffed out a bargain... we became aware of the potentiality of this industry".

The production is entirely managed by a young brew master, Francesco De Maldè, who started to produce beer as home brewer, together with his father; the first kit they used to produce home beer was shipped from U.S. by a cousin that lived there.

Demand

In 2004 craft beer demand was still weak and not defined and investing in this industry represented a risk. At the beginning, the owners largely invested in commercial, in order to advertise their beer and approach consumers to craft beer industry.

Over the last years BABB increased its sales and its production volume thanks to the big success of the entire industry and their ability of offering a first quality product.

According to the brew master of the brewery, demand and offer pushed each other and grew together.

Access to assets and equipment

The opening of both the brewery and the restaurant required a large investment and the owners had to ask for a bank loan. Despite that, the start up of the business was quite easy because, as already underlined, all the six partners had different jobs and most of them were entrepreneurs, so they did not find obstacles in obtaining a loan to open the brewery.

According to BABB's brew master, in 2004 it was more difficult to find small size plants because most of the firms that produced machineries used to work with large beer companies. Today the situation is different because lot of manufacturing firms started to produce smaller plants and equipment due to the big success of craft beer industry.

Laws and Regulation

According to the brew master, cannot be identified any special laws that facilitated the establishment of craft breweries in Italy, except for some incentive pays that have been established to favor the opening of agro-breweries (craft breweries that directly produce and cultivate the raw materials implemented in the beer production process).

On the contrary, twenty years ago, when the movement started to grow and the first craft breweries rose, Authorities had to implement new tools and solutions in order to supervise the activity of these new firms and; process slowed down the opening of new craft breweries. Till then, in fact, Authorities used to monitor the production activity of few and large breweries; the establishment of lot of small breweries forced them to rethink some of the

control procedures.

Value chain analysis

BABB's value chain configuration did not change over the last years.

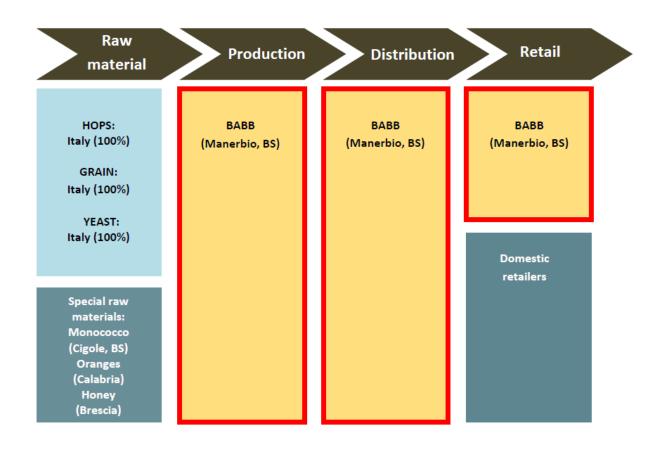
BABB manages entirely in house both production and distribution activity. In addition, thanks to the restaurant that owners established next to the brewery, BABB also partly manages the retail activity.

Essential raw materials are entirely bought from Italian suppliers, located in Veneto and Friuli-Venezia Giulia, even if most of them come from foreign Countries, while special raw materials are purchased by local or specific Italian suppliers.

RAW MATERIALS AND SUPPLIERS

All the raw materials implemented in the production process are purchased from Italian distributors. They import raw materials from all over the world and directly supply Italian craft breweries. According to BABB's brew master, managing relationships with Italian distributors is easier than managing relationships with foreign suppliers, especially because of the bureaucratic procedures required to deal with them.

Figure 3.6: BABB's (2012) value chain





The relation between buyer and supplier is market, because it is merely focused on the price and the cost of switching suppliers is low. BABB, in fact, could purchase similar raw materials from other suppliers.

Table 3.9 shows the origin of the raw materials used to produce beer.

In addition, BABB implements special raw materials in order to produce unique and differentiate beers. The peculiarity and the rarity of these raw materials determined a special rapport between buyer and supplier. In this case the relationships is relational, mostly because the proximity between these two actor favored a stronger and long term relationship.

Monococco, for example, is a special type of grain that has been produced in Po Valley since ten thousand years and it is used by BABB to produce a special beer called Alba (table 3.10). They also use special dry sun oranges from Calabria to give special aromas to their beers or local honey to produce Mellis, the BABB's seasonal beer (table 3.10).

PRODUCTION

The production is entirely manage in house, in the plant located in Manerbio.

BABB not only produce beer for itself, but it also produce beer for other breweries (10%). The big capacity of the plant, in fact, allows BABB's owners to produce beer also for craft breweries that own their own brand.

Table 3.9: Place of origin of BABB's raw materials

Raw materials	Place of origin
Grain	Germany (60%), Belgium (30%), UK (10%)
Hops	Czech Republic (20%), Slovenis (20%), Germany (20%), U.S
	(20%), UK (20%)
Yeast	Italy (100%)
Special raw materials:	
Monococco	Brescia
Oranges	Calabria
Honey	Brescia

Source: author's elaboration

The plant has never changed; it has a 1000 liters capacity, it has been purchased from a German company and, according to the brew master, is one of the best and most expensive plants on the market.

Francesco, the brew master, manages the production activity.

Table 3.10: Range of beer produced by BABB

Alba	White beer produced with Monococco. It is a type of grain which is ten thousand years old was grown in Po Valley.
Bockale	Double malt beer, Belgian strong ale style.
Fusca	Dark beer, oat meal stout style.
Omnia	Bottom fermenting beer inspired by pils style.
Rubinia	Red double malt beer, Doppelbock style.
Mellis	Seasonal double malt beer characterized by honey locally produced.

Source: babb.it³⁰

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³⁰ www.babb.it/birre.html

DISTRIBUTION AND RETAIL

As showed in the value chain configuration, the distribution activity is 100% manage in house, and, in particular, it is run by one of the six owners.

According to the brew master, the relation with external distributors can represent a risk because distributors required high volume of production, which means high sales, but at the same time they force breweries to establish exclusive relationships with them.

Even if distribution management requires a huge effort, BABB decided to personally deal with retailers, in order to create a network of people and relationships based on mutual trust. That is why the type of relationships between producer and retailer is relational.

The 30% of the production is sold in the restaurant located next to the brewery, while the remaining 70% is sold by external retailers. They are mostly represented by restaurants, pubs, and breweries and they are all located in Italy (Lombardia, Trentino Alto Adige, Toscana, Liguria, and Emilia Romagna). Creating strong relationships with retailers allowed breweries to indirectly manage also the retail activity. BABB, in fact, carefully select where and who sell its beer to, in order to be sure that its product is enhanced in the best possible way.

3.4.2.2 32 VIA DEI BIRRAI

Establishment and recent development

32 Via dei Birrai is located in the industrial area of Pederobba, a small town in the province of Treviso; it was founded in 2006 and it is managed by three owners, Fabiano, Alessandro, and Loreno. Loreno manages the commercial activity while Fabiano and Alessandro manage the production activity; the breweries has four extra employees.

32 Via dei Birrai represents one of the most important and successful small breweries in Veneto area, thanks to a strategy characterized by a mix between high quality product and strong commercial activity, based on the product innovation and design. Thanks to this strategy and the ability of exploiting the "Made in Italy" brand, 32 is also one of the few Italian craft breweries that export a significant part of its production all over the world.

The amount of production volume has significantly increased not only from 2006 to 2011, but also from 2011 to 2012 (table 3.11). This data emphasize the rapid growth of this firm that, over the last six years, has been able to reach both the domestic and the foreign market.

Table 3.11: 32 production volume in 2006, 2011, and 2012

YEAR	PRODUCTION VOLUME
2006	26.600 Lt.
2011	210.000 Lt.
2012 (estimated)	257.000 Lt.

Source: author's elaboration

Entrepreneurial motivation

Fabiano and Alessandro attended the same school and know each other since a lot of years. When they were younger, they discovered to share a big passion for beer. Many years ago, they started to produce their beer at home and, during the school breaks, they traveled around Europe to learn the traditional production techniques.

Both of them have been progressively driven by their passion for beers.

The idea of opening a brewery started in 1994, but they decided to take their time and acquire experience before to establish their own business.

Over the time Alessandro became an expert home brewer, while Fabiano has worked for many years as brew master before he decided to open his own brewery together with his partners. Loreno, who is the commercial responsible, has managed for several years a brew pub, and this job gave 32's owners the possibility of taking advantage of the network and relationships he established over the time.

The main entrepreneurial motivation in undoubtedly the passion for beer and the desire, common to all three, to open their own brewery.

Demand

In 2006, the main competitor of craft breweries was wine.

According to Fabiano, in 2006, craft beer was not a popular product. People needed to be educated to a new type of beer, completely different from the one available on the market. Even if the business could be a risk, they decided to open the brewery encouraged by the large experience that each of them gained working in the beer industry.

In addition, between Loreno and Fabiano there was already a commercial relationship because Fabiano used to work in a brewery that sold beer to the brew pub Loreno managed. The network of people they developed during the time have been precious to start up the business and advertise their new product.

Access to assets and equipment

The first plant have been purchased with private founds. Few years later, the increased production volume required new investments, which were realized thanks to a bank loan. All the necessary equipment has been provided by Italian firms located in the same area as the brewery.

According to Fabiano, in 2006 many firms located in the Veneto region started to produce smaller plants and machineries for microbreweries. The establishment of a large number of craft breweries pushed firms that used to produced machineries to produce wine or other components for wine industry, to convert their production to satisfy microbreweries needs.

In addition, artisans who used to work for wine and milk industry, started to collaborate with brew masters and to produce components and equipment for small breweries.

Laws and Regulation

According to Fabiano, law cannot be considered a key factor that determined the success of craft beer industry. On the contrary, bureaucracy makes more difficult and slower microbreweries' activity.

In addition, the different legislation between Europe and Italy often requires small breweries to adapt to both European and Italian models and standards.

Value chain analysis

The current value chain presents the same configuration as the one of 2006, when the brewery was founded.

In 2006, 32 decided to keep in house both the production and the distribution activity and in 2012 they still directly control these two activities.

Suppliers are managed through market relationships, while the relationships with retailers is stronger and carefully managed through relational rapports.

The only difference between 2006 and 2012 concern the foreign retailers. In 2006, in fact, they only sold beer in Italy. Over the last few years, they started to export their products and have been able to reach both European and extra-European markets.

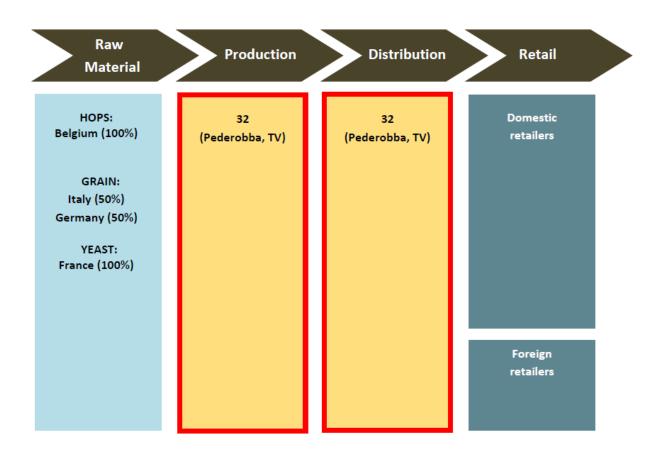
RAW MATERIALS AND SUPPLIERS

32 directly manages relationships with its suppliers, both the Italian and the foreign ones (table 3.12).

The raw materials' high quality represents a key factor to produce high quality products; that is why most of them are purchased from foreign suppliers.

Despite that, the relationships between buyer and supplier can be defined market because the cost of changing suppliers and obtaining, at the same time, similar raw materials' quality, is low.

Figure 3.7: 32 Via dei Birrai's (2012) value chain



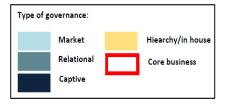


Table 3.12: Place of origin of 32's raw materials

Raw material	Place of origin
Grain	Germany (50%), Italy (50%)
Hops	Belgium (100%)
Yeast	France (100%)

Source: author's elaboration

PRODUCTION

The production is entirely realized in the plant located at Pederobba, Treviso. 32 Via dei Birrai's aim is to obtain high quality products that follow traditional and classic recipes. It is also the first Italian craft brewery that obtained the ISO 9001 certification (which is assigned to companies with Quality Management System certified by qualified bodies) and the CI (Italy Certified, which "certifies that the entire production is fully made in Italy to guarantee superior and controlled quality" 31.

DISTRIBUTION AND RETAIL

32 considers the distribution management and relationships with retailers key steps along the value chain. Even if, over the last five years, production volume has significantly increased, Loreno, the commercial responsible, decided to keep on managing the distribution activity in house. It allows him to supervise, at the same time, distribution and retail activity. 32, in fact, carefully selects where to sell beers and what kind of market to approach.

31 www.32viadeibirrai.com/italian-artisan-brewery.html

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Table 3.13: Range of beer produced by 32

Curmi	"Spiced top-fermented ale made with spelt and barley. It is characterized by		
Curini			
	malt floral notes, aromas of exotic fruit with a slight citrussy acidity and		
	hints of straw, hay and bread crumbs" (32viadeibirrai.com).		
Audace	"Strong, spiced, top-fermented ale. It is characterized by hints of citrus fruit,		
	warm yellow flowers (dandelion, chamomile), almond and peach in syrup"		
	(32viadeibirrai.com).		
Oppale	"Highly hopped top-fermented beer with notes of caramel and toffee with		
	herbaceous sensations and fruity hints of ripe pineapple"		
	(32viadeibirrai.com).		
Admiral	"Amber-colored top-fermented beer cured and caramelized with herbaceous		
	hints and a slight acidity due to the burnt caramel malt"		
	(32viadeibirrai.com).		
Nebra	"Amber-colored top-fermented beer. It offers soft aromas of white flowers,		
1 (cb) a	caramel and lastly a gentle spiciness" (32viadeibirrai.com).		
	curation and tastif a gentile spiritioss (32 (tastelential conf).		
Nectar	"Dark double-malt top-fermented chestnut honey beer with pronounced		
	chestnut honey, balsamic, bitter herbaceous, cured, light caramel aromas,		
	hint of ethyl alcohol when warm" (32viadeibirrai.com).		
	(
Atra	"Top-fermented brown ale roasted, with hints of coffee, chocolate, locust		
	bean, walnut-flavored liqueur, and touches of damp barrel staves, light		
	liquorice, ripe medlar and caramel" (32viadeibirrai.com).		
3+2	"Highly hopped, spiced, light, top-fermented ale with secondary		
312	fermentation in the bottle. It is intensely fruity and herbaceous with hints of		
	citrus fruit. Only slight hint of ethyl alcohol" (32viadeibirrai.com).		
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Source: 32viadeibirrai.com³²

As already mentioned above, 32 used to compete against wine. Because of that, they tried to develop a sophisticated product, which was able to be displayed together with wine in fancy restaurants and wine shops. The label and the logo have been expressively designed to be attractive and easily identifiable.

Today 32 not only compete with wine, but also with other craft beers and the strategy to success is still selecting retailers in order to reach specific markets and consumer targets.

32 created a sales network consisting of sixty agents that are deployed in all the Italian regions.

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³² www.32viadeibirrai.com/italian-artisan-beer.html

They allowed 32 to be spread on the Italian territory, but all the relationships with retailers are still managed and controlled by 32.

The success of this firms is further proved by its growth on foreign markets (table 3.14). In 2011 the percentage of beer exported was around 6%; in 2012 32 have been able to export the 15% of its production. In 2013 they have already planned new investments to approach Spanish and Greek markets. These investments on foreign markets represent a long term strategy and, according to Loreno, the future goal is to export 50% of the entire production.

Table 3.14: Foreign markets and percentage of export, 2011, 2012, and 2013

YEAR	COUNTRIES	% OF EXPORT
2011	Australia, Japan, Germany	6%
2012	France, Hong Kong, China, U.S.	15%
2013	Greece, Spain	

Source: author's elaboration

3.4.2.3 MORGANA

Establishment and recent development

Morgana brewery was founded in 2008 in a small town in the province of Treviso by Andrea Zanatta and Francesco Zorzetto. They are friends since a lot of years and they own a restaurant/wine bar in Venice called "La Cantina".

Both of them are keen about food and wine, but in 1997 they participated in a fear during which they learned how to produce beer and became craft beers supporters.

From that moment they started thinking about the possibility of producing their own beer and selling it in their restaurant.

After many experiments at home, in 2008 they opened a small brewery and it was based in Morgano because of the availability of pure water in that area; water is, in fact, considered by Andrea Zanatta fundamental to produce a high quality beer. Andrea and Francesco are co-owners of the brewery, but Andrea is the responsible of the production activity.

The success of this firm is confirmed by data in table 3.15 and 3.16. From 2008 to 2011 Morgana's sales increased by 52% and from 2011 to 2012 the estimated increase is around 55%. From 2008 to 2011 the production volume increased by 33% and in 2012 the estimated growth is about 80%.

Table 3.15: Morgana total sales in 2008, 2011, and 2012

YEAR	TOTAL SALES
2008	80.000 €
2011	122.000 €
2012 (estimated)	190.000 €

Source: author's elaboration

Table 3.16: Morgana production volume in 2008, 2011, and 2012

YEAR	PRODUCTION VOLUME
2008	30.000 Lt.
2011	40.000 Lt.
2012 (estimated)	72.000 Lt.

Source: author's elaboration

Entrepreneurial motivation

In 1997 Andrea and Francesco participated in a fair, in Udine, where they discovered how beer is produced; from that moment they started to produce beer at home and experiment techniques and recipes. After years of experiments and home brewing activity, in 2005, Andrea and Francesco decided to look for a place where opening their brewery and in 2008 they officially started the new business.

Passion for beer is undoubtedly the main motivation leading to the establishment of the brewery. The restaurant they own in Venice gave them the possibility of offering their beer to loyal customers and trying out their creation.

Demand

In 2008 craft beer demand was weaker than today and it cannot be considered the main motivation that led Andrea and Francesco to open a craft brewery. They did market researches and talked with their distributors to better understand how their beer could be positioned on the

market. They were aware about risks, but the possibility of selling their own beer in their restaurant represented a less risky way to approach the market.

At the beginning, in fact, they started to sell Morgnana beer in Venice and to advertise it among customers and friends and later they proposed their wine distributors to introduce Morgana in their range of products.

Progressively, they gained success among their loyal customers, friends, and increased the number of clients through external distribution channels.

Access to assets and equipment

According to Andrea Zanatta, over the last few years, many Italian firms that used to produce equipments and components for wine industry have been able to reconvert their production activity and offer microbreweries technologies and machineries.

The first plant he used to produce beer at home was very small and its production capacity was limited. The first experiments on large scale have been realized with a bigger plant purchase in Castelfranco Vento, close to the brewery's location (100 liters of capacity); but it was too small and, to start Morgana's production, he had to buy a new plant from a firm located in Spoleto. This firm was specialized in machineries' production for wine industry but over the last years, thanks to a collaboration with several brew masters, it convert its production and started to produce small size plants for craft beer industry. The collaboration developed between beer and manufacturing industry gave advantages not only to microbreweries, but also to manufacturers, which developed new skills and capabilities and established new profitable collaborations with craft breweries.

Laws and Regulation

According to Andrea Zanatta, laws and regulation did not particularly encouraged the establishment of craft breweries in Italy. The high excise tax $(0,30 \in \text{per liter of beer that contains 5% of alcohol)}$, especially, penalizes breweries that produce limited quantity of beer and have, at the same time, to write off high fixed costs.

Despite that, control procedures became easier and faster if compared with ten years ago. In the past, production supervision was carried out by customs officers directly on the site. The establishment of a large number of small breweries required the development of new tools in order to control automatically the breweries' production.

Today, each plants have a seal that automatically measures the production volume made by the plant.

In addition, in Italy there are no special laws regarding self-distribution. It means that small breweries are able to produce and distribute their own beer without any limits and it is fundamental, especially at the beginning, when brewers cannot afford to manage external distributors.

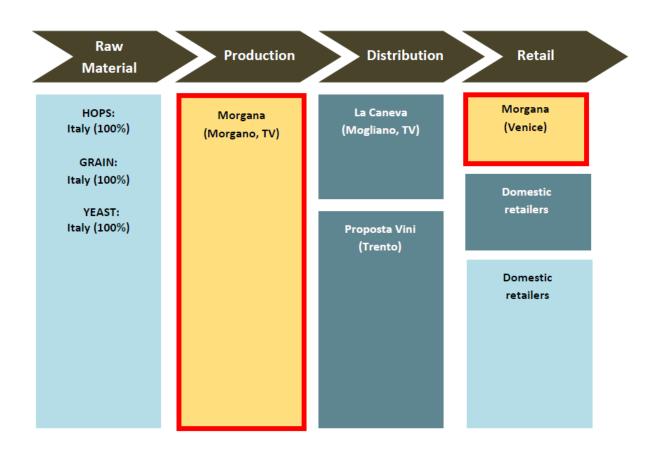
Value chain analysis

From 2008 until today Morgana's value chain held steady, except for the number of retailers, which progressively increased over the last four years.

Among the Italian case studies analyzed, Morgana is the only craft brewery that decided to externalize the distribution activity and manage relationships with external distributors. Like other breweries, it chose to purchase raw materials directly from large Italian suppliers that import the best ones from all over the world.

Regarding the retail activity, partly is managed in house trough the restaurant located in Venice, while part of the production is sold to domestic retailers.

Figure 3.8: Morgana's (2012) value chain





RAW MATERIALS AND SUPPLIERS

All the raw materials are purchased in Italy, from Italian suppliers located in Mestre (Venezia) and Udine. The relationship between buyer and supplier, as already seen in the other case studies, can be defined market, because the cost of switching supplier is relatively low.

According to Andrea Zanatta, because of the small production volume, it is more convenient to buy the necessary raw materials from Italian distributors instead of establishing relationships with foreign suppliers, especially because these relationships would require a large amount of bureaucratic procedures. Despite that, most of the raw materials come from foreign Countries, especially Germany and UK, two of the most important beer producers (table 3.17).

Table 3.17: Place of origin of Morgana's raw materials

Raw material	Place of origin
Grain	Germany (90%), UK (10%)
Hops	Germany (40%), Czech Republic (30%), UK (20%), USA
	(10%).
Yeast	Italy (100%)

Source: author's elaboration

PRODUCTION

Production is entirely realized in the plant located in Morgano, Treviso.

In addition to Morgana's production, the brew master also produce beer for external breweries that hold their own brand (about 50% of the entire volume of beer produced).

As showed in table 3.18, they produce only one type of beer.

The production process implemented to produce Morgana beer is particular and complex. This beer is also defined by Andrea and Francesco a special beer because of the sediment settled in each bottle of beer. This sediment is the result of a production process free from filtration step. All the ingredients are alive and that emphasizes beer aroma and taste.

Moreover, the later phase of the production process is similar to the one implemented to produce Champagne; after the fermentation, in fact, Andrea adds some sugar in order to cause a secondary fermentation. This complex production process give life to a unique craft beer³³.

Table 3.18: Range of beer produced by Morgana

Morgana	"It is an unfiltered and unpasteurized beer, in which all the main ingredient
	that are still alive, keep on working. The high temperature fermentation
	perfectly balance sugars, body, and mouth feel" (birramorgana.com)

Source: birramorgana.com³⁴

DISTRIBUTION AND RETAIL

As already underlined, Morgana decided to externalize the distribution activity. Because of the restaurant/wine bar the owned in Venice, in 2008, Andrea and Francesco already had contact with distributors, especially the ones that worked in the wine industry. They decided to collaborate with these distributors in order to advertise their beer and reach retailers located in different regions.

34 www.birramorgana.com/en/la-morgana/

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³³ www.birramorgana.com/en/come-si-fa/

La Caneva, the distributors located in Veneto, is the smallest and it mainly distributes around Venice and Treviso's area. The other one, Proposta Vini, is located in Trento, it is much bigger than the previous one, and it distributes in all the Italian regions.

The relationship between Morgan and its distributors is a long term relationship; it was, in fact, established earlier than the opening of the brewery and it is based on mutual trust and reciprocal knowing. It can be defined relational because of the collaboration they developed over the time.

The retail activity is partially managed by Andrea and Francesco because the 20% of the entire production is directly sold in their restaurant.

Referring to the type of relationship between producer and retailers, Morgana's retailers can be divided in two categories. The first is represented by domestic retailers directly managed and chose by distributors; between Morgana and these retailers there is relationship based on the price; that is why it is define a market relationship. The second one is represented by retailers with which they developed relationships over the time, even before the opening of the brewery. Being owner of a restaurant, in fact, Andrea and Franscesco had the possibility of developing a network, not only regarding distribution channels, but also regarding retailers. In this case, the type of relationship can be defined relational because of the long term collaboration, the proximity, and the mutual trust developed over the years.

So far, Morgana distributes only in Italy. In the future Andrea would like to export his beer and try to reach new markets. More specifically, he is in contact with two distributors in order to reach the U.S. market. According to Andrea the main problem regarding the export activity is represented by the price; shipping costs and taxes, in fact, highly increase the final price of the beer, which is usually much more expensive than the industrial one.

3.4.2.4 VALSCURA

Establishment and recent development

Valscura is a small craft brewery located in Sarone di Caneva, a very small town in the province of Pordenone (Friuli Venezia Giulia), and it was founded in 2007 by Gabriele Mazzer and his wife Renata Danieli. The brewery is owned and manage by Renata and Gabriele; they also collaborate with a brew master that helps them during the production process.

As showed by table 3.19 and 3.20, from 2007 to 2011 Valcura significantly increased both production volume and sales. Between 2007 and 2011, in fact, sales increased by 94%; in the same period the total amount of liter produced increased by 59%, and the 2012 estimated production volume will be comparable to the one registered in 2011.

Table 3.19: Valscura total sales in 2007 and 2011

YEAR	TOTAL SALES
2007	90.000 €
2011	175.000 €

Source: author's elaboration

Table 3.20: Valscura production volume in 2008, 2011, and 2012

YEAR	PRODUCTION VOLUME
2008	22.000 Lt.
2011	35.000 Lt.
2012 (estimated)	35.000 Lt.

Source: author's elaboration

Entrepreneurial motivation

Both Gabriele and Renata can be considered beer aficionados and their passion for beer is the main entrepreneurial motivation that lead them to the decision of establishing a craft brewery. Renata used to work for many years in a English style pub, where were mostly sold German, Belgian, and England style beers. Gabriele still works in a firm that produces technological plants for food and beverage industry; his job gave him the possibility of witnessing the craft beer industry growth. Their jobs approached them to craft beer industry and in 2005 they officially registered their brewery; the production officially started in 2007.

Neither Gabriele nor Renata used to be home brewers before opening their brewery so they

asked for the help of a brew master. He is not a full time employee; he just help them during some steps of the production process (once a month).

Demand

According to Gabriele, in 2007, when Valscura started producing beers, there was no high demand of craft beers; at that time people were just curious about this new type of beer. Over the last five years, Gabriele noted that people started to ask for craft beers; now there is a real and growing demand.

According to Valscura's owner, today, consumers know and taste many types of craft beers; they are able to recognize different brands and choose which is the one they prefer.

Today, in fact, consumers no longer taste beer, but they make a proper selection because they know the product and became more expert and connoisseur of craft beers.

Access to assets and equipment

As already mentioned above, Gabriele still works in a small firm located in Veneto, which produces technological plants for food and beverage industry.

Over the last fifteen years ago, his company showed interest in craft beer industry and started to collaborate with microbreweries in order to offer them small size technologies and machineries.

As already underlines in the previous case studies analysis, many small and medium size firms took advantage of their knowhow and converted their production to collaborate with craft beer industry. Gabriele purchased his plant from a Canadian firm, which hold a filial in Veneto and used to collaborate with his firm. It is evident that the network of relationships established by Gabriele through his job has been largely useful to access resources and technologies necessary to open the brewery.

Laws and regulation

According to Gabriele, there are no laws or regulation that determined the growth of craft beer industry.

On the contrary, as already underlined by other breweries' owners, the heavy bureaucratic procedures represent a loss of time and slow down breweries' activity.

Value chain analysis

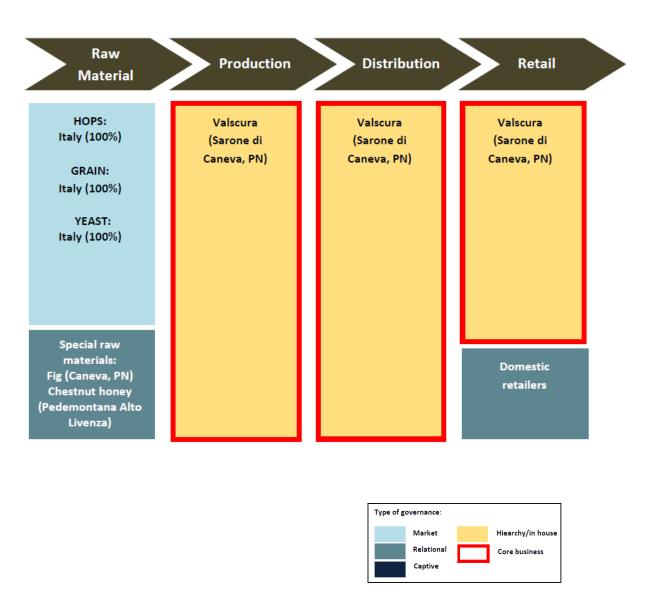
Valscura is a small brewery and most of the activities along the value chain are directly managed in house. Between 2007 and 2012, the value chain configuration did not change.

All the raw materials are purchased from Italian distributors, but most of them are cultivated and imported from foreign Countries.

Production and distribution are managed by Valscura.

Retail activity is partly managed by Valscura and partly managed by external retailers

Figure 3.9: Valscura's (2012) value chain



RAW MATERIALS AND SUPPLIERS

As already showed in some of the previous case studies analysis, the essential raw materials (grain, yeast and hops) are purchased from Italian distributors. Most of these raw materials are imported from foreign Countries (table 3.21), especially German, Belgium, and UK. These Countries are still considered the most important suppliers of high quality raw materials by Italian beer producers.

The relationship between buyer and supplier is market, because Valscura could easily be able to replace its suppliers and obtain, at the same time, high quality raw materials.

In addition to traditional raw materials, during the production process, Gabriele implements some special raw materials, in order to obtain unique and differentiated beers. Example of these raw materials are special figs cultivated in the province of Pordenone or a special quality of chestnut honey, produced in the Pedemonatana's area. The relationship between Valscura and these suppliers is relational because of the proximity and because of the importance of those special raw materials. They are, in fact, unique and cannot be purchased by other suppliers. In addition, the proximity between buyer and suppliers enabled a relationship based on mutual trust and sharing of common values.

Table 3.21: Place of origin of Valscura's raw materials

Raw materials	Place of origin
Grain	Germany 85%, Belgium 8%, UK 7%
Hops	UK 60%,Czech Republic 20%, Germany 20%
Yeast	Italy 100%
Special raw materials:	
Fico moro	Caneva (Pordenone)
Chestnut honey	Pedemontana Alto Livenza

Source: author's elaboration

PRODUCTION

The production is entirely realized by Gabriele and Renata in the plant located in the province of Pordenone in collaboration with a professional brew master.

Valscura produces nine different type of beers and each one is characterized by special features and flavors (table 3.22).

Table 3.22: Range of beer produced by Valscura

Liquentia	"Clear beer from straw yellow, product with the best spring grains type PILS, presents fresh hops of the Hallertauer, produced with purest spring	
	water of Alto Livenza according to the law of Bavarian purity refine malt notes" (valscura.com).	
Santa Barbara	"Red beer to top fermentation characterized by considerable fruity scents and persistent notes of hops" (valscura.com).	
Panera	"Shimmering with milky colors white with barley and wheat, wheat pure malt beer. Crème caramel and vanilla flavors Re-fermented in the bottle. Refreshing and lightly sour" (valscura.com).	
Gerambrata	"Amber Beer style Best Bitter beautifully hopped, re-fermented in the bottle" (valscura.com).	
Fich	"Beer season in style Figo Moro Caneva full voluptuous scents and flavors of fig re-fermented in the bottle" (valscura.com).	
Castegna	"Castegna" in Saronese dialect is the chestnut, autumnal fruit of the overhanging forests the Birrificio, poor food gift of the nature; with experience and innovation they come united ammostate to the honey of chestnut tree of the Pedemontana Alto Livenza. A selection of I leaven special to high fermentation confers to the beer one characteristic only and original in the panorama of the beers of handicraft chestnuts" (valscura.com).	
Valscura	"Dark top fermentation Belgian type with scents of spices, fruitiness, decisive and warm beer with aromas of toasted and liquorice" (valscura.com).	
Canipa	"As in medieval times, a judicious mixture of herbs and spices, herbs, grains such as barley and rye old, mixed with malted barley and water surge, give the beer a taste rough, but full on the palate. Scent of fresh peppermint and wormwood, bitterness arising from the continuous and persistent artichoke, chicory and thistle" (valscura.com).	
Blanche	"White beer with malt barley and wheat and spice pure re-fermented in the bottle" (valscura.com)	

Source: valscura.com³⁵

³⁵ www.valscura.com/nostreBirre_eng.html

Some of them can be considered classic and traditional beers because they are produced following traditional recipes. Others are special beers, produced with special ingredients, such as figs or chestnuts.

According to Gabriele, consumers appreciate classic beers but love special beers characterized by unusual ingredients and unique taste.

DISTRIBUTION AND RETAIL

Distribution activity is managed in house by Valscura. The limited production volume does not allowed Valscura to afford external distributors and, at the same time, Gabriele choose to keep in house the distribution activity because he does not want to lose the relationships he established with his customers. The 70% of the total production is directly sold to private clients on the production site. It means that the 70% of the retail activity is directly managed by Valscura's owners and that they establish strong relationships with their customers. The possibility of selling beer on the production site, in fact, gave them the possibility of showing customers how and where beer is produced, making people taste beer, and attracting consumers directly inside the plant.

The remaining 30% is distributed to external retailers, such as pubs and restaurants located in Friuli-Venezia Giulia, Lomabrdia, Veneto, Emilia Romagna, and Lazio.

The relationships Giovanni established with these retailers is first of all a personal relationship. He, in fact, carefully selects where selling his beers because he wants to be sure retailers are able to properly advertise and offer his products. That is why, along the value chain, the relationship between Valscura and its retailers is considered relational.

CHAPTER 4:

'U.S. BEER INDUSTRY'

4.1 U.S. beer industry: rise and development until 1980s

Between 1640 and 1840 the American beer industry was all in the hands of a low number of firms; they were mostly small and craft-based.

In the second half of nineteenth century many factors encouraged the growth of this industry: improvements in transportation system, domestic production of cereals and grains, technological development, and increasing wealth. The establishment of a growing number of breweries came, then, as a natural consequence of the overall industrial growth.

Horvath, Schivardi, and Woywode (2001) argue that around 1850, due also to the influence of German immigrants, both beer daily drinkers and beer connoisseurs, consumers' tastes started to shift away from craft beers to lighter beers; their low alcoholic level, in fact, made it possible to drink beer in large quantities.

According to Craftbeer.com, one of the most important websites about beer industry in USA, in 1873 there were more than 4,000 breweries. In 1914 per capita beer consumption was about 20 gallons (around 75 liters), which is comparatively high if considered the c.a. 21.5 (around 81 liters) today³⁶.

This data demonstrate that at the beginning of the last century beer was extremely popular among the U.S. population.

As stated by Clemons et al. (2006), prior to 1920 beer had a territorial connotation. At that time, in the U.S., there were more than 1,300 small breweries; the average of their annual production was around 54.7 million barrels. In 1920, the passage of Eighteenth Amendment to

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³⁶ www.craftbeer.com/beerology/history-of-beer/the-american-story

the American Constitution determined the beginning of Prohibition. From 1920 to 1933, most of the small_breweries were forced to close and in 1933, when the Twenty-first Amendment revoked Prohibition, the total number of breweries in the Country was less than three dozen (Clemons et al., 2006).

Horvath, Schivardi, and Woywode (2001) emphasize that the enactment of constraining laws regarding alcohol in many states before 1920, and the anticipation of Prohibition, led to the closing down of many breweries between 1910 and 1919.

On January 16th, 1920, the advent of Prohibition imposed a ban on the manufacture, import, sale, and transport of alcohol. The Eighteenth Amendment was a blow for U.S. local breweries.

"As a result, the USA had no legal beer production for fourteen years. There was some illegal beer production in this period, but only minimal. Total beer output collapsed" (Poelmans and Swinnen, 2011:10).

The Prohibition led to the shutdown of the vast majority of breweries (Murray, 2012)

Despite the end of Prohibition in 1933, the few survived breweries did not face favorable conditions to re start their business. Most of them were forced to close to leave room for large companies that produced lighter and lower price beers. In that period in fact, the ever-increasing demand of beer by the population could only be satisfied by large breweries, which began to grow larger and larger. They started producing large quantities of beer due to their capability of reaching economies of scale. These beers were an alcoholic version of carbonated soft drinks, whose consumption was mainly related to sporting events or moment of leisure.

In addition, the spread of refrigerators and chemical preservation systems favored beers sales' in any supermarket and store, and allowed consumers to preserve them at home.

According to Swaminthan (1998), from 1934 to 1981 the number of breweries decreased by 95%; the total number of breweries passed from 933 to 43 (figure 4.1). As shown in figure 4.1,

between 1970s and 1980s, U.S. beer industry reached the lowest number of breweries ever. This fall on breweries number after Prohibition was due not only to breweries failures, but also to the growing trend for mergers and acquisitions between firms.

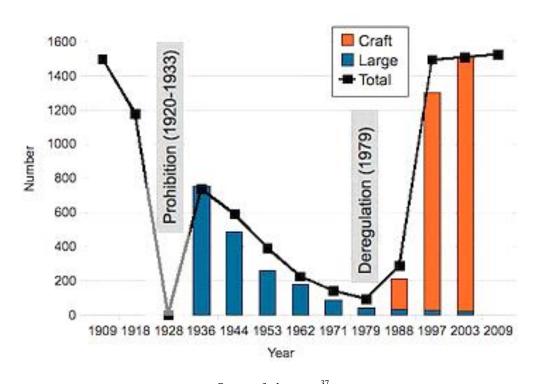


Figure 4.1: U.S. Brewery count from 1900 up to 2009

Source: forbes.com³⁷

In addition, as stated by Adams, "during the third quarter of the twentieth century, technological progress enabled the automation of brewing and the acceleration of packaging.

³⁷ www.forbes.com 'The rise of craft beer in America', 2011.

The scale-augmenting properties of this progress induced a shakeout, in which a few national brewers grew while most regional and local brewers disappeared. The success of the nationals resulted from their advantages in television advertising" (2006:189).

After Prohibition, as a consequence of this situation, beer market started to become more and more concentrated. Today few Multinational Corporations hold a high percentage of the whole market share.

Poelmans and Swinnen (2011) state that the Multinational Corporations growing trend was reinforced even further during the 1980s and 1990s. MCs, in fact, started looking for foreign markets in order to increase their sells. "European and American breweries started to export more beer overseas, establish new firms abroad, and engage in 'licensing deals' in some countries where the already existing breweries started brewing their products" (2011:13).

As shown by data below (table 4.1), in 2011 ABI InBev and MillerCoors hold almost 80% of the domestic market share, which in 2011 represented the 87% of the entire market ³⁸.

ABI InBev is a multinational company and its portfolio includes more than 200 beers from all over the world. Among these there are global brands such as Beck's, Corona, Stella Artois, and Budweiser. MillerCoors is a joint venture between SAB Miller and Coors; it was founded in 2007 with the aim of competing against ABI InBev in the U.S. beer market. Its portfolio includes Miller, Coors, and Blue Moon.

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³⁸ www.beerinsights.com/popups/majorshipments.html

Table 4.1: 2011 market share percentage of U.S. beer industry

Major Suppliers	2011 Market share %
AB InBev	46.9
MillerCoors	28.4
Crown Imports	5.7
Heineken USA	3.8
Pabst	2.7
NAB	1.3
Diageo/Guinness USA	1.2
Yuengling	1.2
Boston	1.2
Mark Anthony (Mike's)	0.7
Others	7

Source: beerinsights.com ³⁹

4.2 Craft beer movement

According to Poelmans and Swinnen, in "the first half of the twentieth century, several grain shortages caused a further shift in beer brewing and ultimately in consumer preferences in the USA" (2011:14). During World War I, the U.S. Government imposed a grain rationing that forced brewers to brew beer with lower alcohol content. In addition, the 1930s' 'dust bowl' drought significantly increased the grains price. Brewers started looking for a substitute for barley, such as corn and rice, which were cheaper grains. Their use in the production process made beers lighter in color and they were called 'American lager beers' or 'light lager' (Poelamns and Swinnen, 2011).

³⁹ www.beerinsights.com/popups/majorshipments.html

Rao et al. (2000) argue that at the beginning of the 1980s, U.S. beer industry was divided between domestic and imported beers. The former were characterized by a light taste and a low price; the latter ones were sold in green bottles and had more flavor. Craft brewer movement arose in reaction to industrial beers produced by Multinational Corporations, in particular ABI InBev and MillerCoors (Rao, Morrill, and Zald, 2000).

The Brewer Association website explains that "in 1976 what some call the true renaissance of American craft brewing emerged with the founding of The New Albion Brewery in Sonoma, California by a homebrew enthusiast. While this brewery went out of business after about 6 years, there were hundreds of home brewers that were inspired and followed in their footsteps and started breweries in the early 1980s".

One of the laws that mostly favored the establishment of small craft breweries was the House Resolution n.1337 and Senate Amendment n.3534, which was signed on October 14, 1978 by President Carter and legalized home brewing. Over the next years, the enacting of favorable laws allowed the rise and spread of small scale breweries and brewpubs⁴¹.

"During the 1980s, people started to show a renewed interest in 'older' beer styles, such as porter, pale ales and brown cask ales, stout and bitters" (Poelmans and Swinnen, 2011:14).

Home brewing represented for many years the only way to produce and drink beer with more flavor and stronger taste than the ones available on the market. Brewing their own beer, U.S. brewers could experience different styles and production methods, often coming from other Countries. This movement gave birth and shape to the craft brewing movement⁴².

According to Kleban and Nickerson (2011), U.S. craft breweries are characterized by small dimension, are traditional and independent. The term traditional especially refers to the production process. Craft breweries in fact, produce full body beers, often following recipes

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⁴⁰ www.brewersassociation.org/pages/about-us/history-of-craft-brewing

⁴¹ www.martygaal.com/words/microbrew.html

⁴² www.brewersassociation.org/pages/about-us/history-of-craft-brewing

from German, England, and Belgian tradition. The most distinctive features are the implementation of a slow production process, the high degree malt processing, the small-scale production, the production of unique beers characterized by enhanced taste and flavor.

As stated by Brewers Association, "the 1980s marked the decade of the micro brewing pioneers. In a time when industry experts flat out refused to recognize their existence as anything serious, the pioneering companies emerged with their passion and a vision, serving their local communities a taste of full flavored beer and old world European traditions; all with what was to become a uniquely American character⁴³.

Despite of the great concentration of the U.S. beer industry, these small breweries have been able to emerge and spread their values all over the Country.

Adams (2006) underlines that there are currently two strategic groups that occupy U.S. beer industry: mass brewers and Multinational Corporations, which still hold the biggest market share. They sell both in U.S. and in foreign Countries and the marketing strategy is mainly focus on the creation of big advertising campaign on television. On the other side there are craft breweries, which sell their beers mainly locally and differentiate their products tanks to the use of high quality raw materials.

According to Kleban and Nickerson (2011), U.S. craft breweries can be divided in different categories:

- Nano breweries: their production volume is less than 30 barrels (around 3,600 liters) of beer per year.
- <u>Microbreweries</u>: their production volume less than 15 thousand barrels (around 1,700,000 liters) of beer per year. "More than 75% of its beer production is sold

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⁴³ www.brewersassociation.org/pages/about-us/history-of-craft-brewing

outside the brewery" (2011:35). Microbreweries reach the final market following different channels:

- o From brewery to wholesaler to retailer to consumers
- o From brewery as wholesaler to retailer consumers
- o From brewery as a bar/on-site tap sale to consumers
- Brewpub: brewpubs and restaurant-based breweries are two possibilities that craft breweries have to control retail activity. Laws regarding brewpubs differ from state to state. In some states for example is allowed to sell beer on the production site.
- Contract Brewing Companies: they comprehend breweries that decide to outsource their production to another brewery. They provide specifications regarding the beer brewing and are responsible for marketing, distribution and selling. The other brewery provides equipment, space, and infrastructure to produce the beer. Famous U.S. examples of contract brewing companies are Samuel Adams and Boston Beer Co.
- Regional Craft Brewery: their production volume is between 15 thousand and 2 million barrels per year (between 1,700,000 and 230,000,000 liters of beer)
- <u>Large Brewery</u>: their production volume is over 2 million barrels per year (more than 230,000,000 liters).

4.2.1 Recent development and economic trends

The craft brew industry in the U.S. experienced a rapid growth over the last thirty years and over the last five years the number of breweries further grew (figure 4.2).

In 2006, the reported number of craft breweries in the U.S. was 1,370, and in 2010 were reported 1,625craft breweries. It means that the total number increased over 18% in less than five years, which is the highest growth rate in U.S. history since before the Prohibition era

(Kleban and Nickerson, 2011). Moreover, from 2010 the number of craft breweries grew significantly. In February 2012 it reached 2,000 units and the last Brewers Association update (July 1th, 2012) reports 2075 craft breweries operating in the U.S.⁴⁴.

This growth is confirmed by data regarding the volume of beer produced (table 4.2). Data show that production has constantly increased from 2005 up to 2011. In six years it increased by 80%.

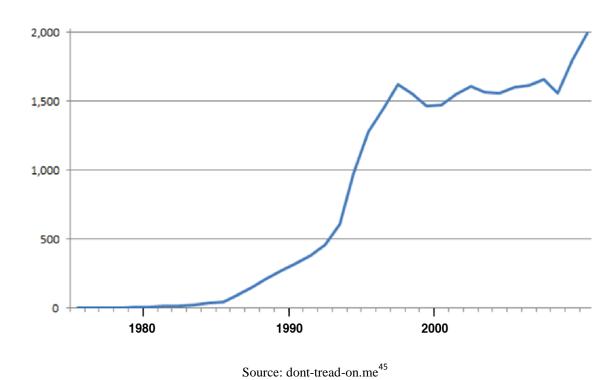


Figure 4.2: Number of craft breweries in U.S., 1976-2011

44 www.brewersassociation.org/pages/business-tools/craft-brewing-statistics/number-of-breweries

www.dont-tread-on.me 'The beer war on American soil', 2012.

Table 4.2: Barrels of craft beer produced from 2005 up to 2012

Year	Barrels of craft beer produced (in millions)
2005	6.3
2006	7.1
2007	8.0
2008	8.5
2009	9.1
2010	10.1
2011	11.5 (+80% from 2005)

Source: bevindustry.com⁴⁶

In 2011 craft breweries sold 11,486,152 barrels of beers, while in 2010 they sold around 10,133,571 barrels of beers. In 2011 sales share of craft beer industry was 5.7% by volume and 9.1% by dollars of the \$95.5 billion total U.S. beer market⁴⁷. Table 4.3 shows the total sales of craft beer industry in billions, from 2007 to 2011.

In five years this industry has been able to increase its sales by 51% and in 2011 craft beer industry market share was around 5.7% (figure 4.3)

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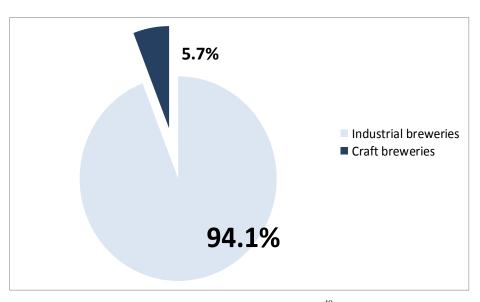
www.bevindustry.com/keywords/3498-craft-breweries
 www.bevindustry.com/keywords/3498-craft-breweries

Table 4.3: Craft beer sales 2007-2011 (in billions)

Year	Sales
2007	5.74 USD
2008	6.34 USD
2009	7.00 USD
2010	7.60 USD
2011	8.70 USD

Source: Brewers Association⁴⁸

Figure 4.3: 2011 beer industry market share (volume)



Source: washingtonbeerblog.com⁴⁹

www.testosteronepit.com/home/2012/3/28/the-beer-war-on-american-soil.html www.washingtonbeerblo.com/craft-beer-business-enjoyed-impressive-growth-2011/

4.3 North Carolina craft beer industry

4.3.1 Introduction

The first craft brewery in North Carolina was founded in 1986 after the North Carolina Government passed a law that allowed the establishment of brewpub in the state, until then considered illegal (Meyers, 2012).

It was called the Weeping Radish Brewery and it was opened in the Outer Banks (Murray, 2012). As shown in table 4.5, by 1995 there were six craft breweries in North Carolina, 17 by 2000, and 32 by 2005.

2005 represented a key year for craft beer industry development in the state because from that year North Carolina has enacted several provisions that favored the development and the establishment of many breweries in the state.

According to Parker (2012), recent changes in North Carolina's laws led to the rise and spread of craft breweries in the state, such as:

- <u>Pop the Cap' campaign</u>, a movement which resulted in 2005 legislation that raised the allowable amount of alcohol by volume ("ABV") in malt beverages from 6% to 15%" (Parker, 2012);
- <u>Special tasting permits</u>: a new law approved in 2009 which allows brewers to offer beer tasting on the site thanks to special permits (Parker, 2012);
- Session Law 2011-107 and Session Law 2011-419 (2011): these laws permit
 North Carolina brewers to sell their beers directly on the production site (Parker,
 2012);
- <u>Session Law 2012-4</u>: this legislation refers to brewers' self-distribution rights. It allows small breweries (less than 25,000 barrels per years) to terminate the relationship with distributors (Parker, 2012);
- <u>Economic development incentives</u>: over the past few years, North Carolina allocated funds to encourage the opening of new breweries. One of them, the One

North Carolina Fund, funds both new breweries and existing breweries that decide to expand (Parker, 2012).

4.3.2 Economic trend and recent development

North Carolina is currently one of the States with the fastest growing rate of craft breweries in the United States and it is one of the most important craft beer producers in the South area of the Country (Francioni 2012; Grillo 2008). As showed in figure 4.4 North Carolina is also one of the U.S. states with the high number of craft breweries and it is the also the only one representing the Southern East.

From 2000 North Carolina has been characterized by a rapid increasing of number of breweries. Especially after 2005, the number of craft breweries has significantly increased (Table 4.4). One of key factors was undoubtedly represented by the change in laws and regulation occurred over the last ten years and encouraged by "Pop the Cap" campaign.

Table 4.4: Number of breweries in NC, 1986-2012

Year	Number of Breweries
1986	1
1995	6
2000	17
2005	32
2012 (January)	58

Source: Murray, 2012 and Francioni, 2012.

Although there are not yet official data, the last update (June 2012) indicates that the number of NC breweries reached 61 units⁵⁰. In addition, some other breweries are going to open over the next months and they will raise the total number of breweries in North Carolina.

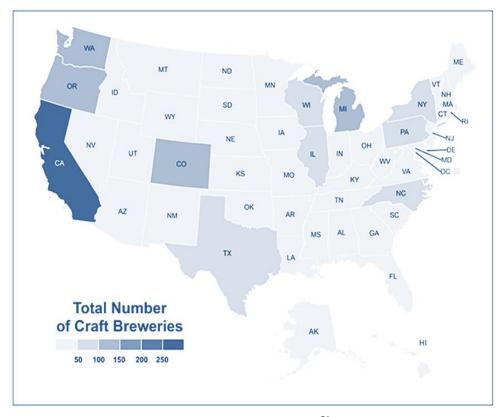


Figure 4.4: Total number of craft breweries in U.S.A.

Source: theatlanticcities.com 51

Craft beer industry success in North Carolina positively affected the economy of the entire state. As underlined by Balchunas and Kennedy, "brewing beer is one of the most traditional

 $^{^{50}}$ www.ncbeer.org/brewery-map/ 51 www.theatlanticcities.com/arts-and-lifestyle/2012/08/geography-craft-beer/2931/

forms of biomanufacturing and is quickly becoming a major industry in Western North Carolina" (2012:16).

Triangle Area (Raleigh, Durham, and Chapel Hill) and Asheville area represent two of the North Carolina's region with the higher concentration of craft breweries (Francioni, 2012). Thanks to these two regions, North Carolina became an important stage for craft beer aficionados and NC Brewers Guild is one of the fastest growing guilds in the U.S. (NC Brewers Guild, 2011).

In addition, Asheville has been awarded "Beer City USA" in 2009 (dead heat with Poertland), 2010, 2011, and 2012 (dead heat with Grand Rapids).

As reported by Balchunas and Kennedy, North Carolina's craft beer identity is reinforced farther "by industry giants Sierra Nevada and New Belgium, the second and third largest craft breweries in the country, respectively. Both have recently announced plans to build breweries in the area. Sierra Nevada is building a 300,000 barrel capacity brewery and New Belgium's 400,000-barrel brewery will open in 2015" (2012:16).

4.3.3 Case studies

Along with the previous chapter, this section will examine four case studies of four craft breweries based in North Carolina. Two of them are located in the Triangle area, which comprises Durham, Raleigh and Chapel Hill and is considered one of the most important areas for craft beer production in NC and in the USA alike (figure 4.5).

The other two are located in Asheville. It is the main hub and center of a craft beer cluster which testifies to the importance of this region for this practice (figure 4.5).

This study will provide an overview of the industrial organization of craft beer production in the Asheville and Triangle areas.

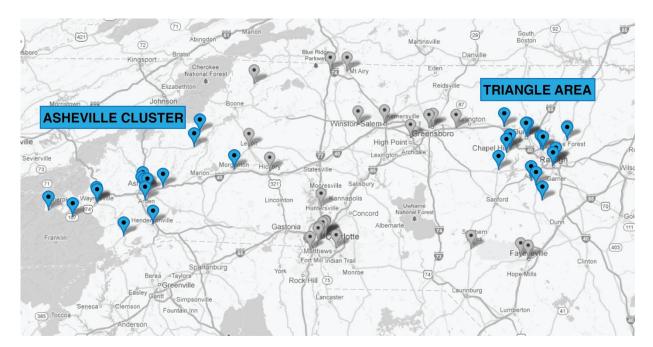


Figure 4.5: Location of NC craft breweries

Source: ncbeer.org ⁵²

4.3.3.1 Triangle Brewing Company

Establishment and recent development

Founded in 2007, Triangle Brewing Company (TBC) is the first craft brewery established in Durham. It was opened by Rick Tufts and Andy Miller, who have been friends since high school. TBC is located in the north-east of the city.

In addition to Rick and Andy, the brewery has two other employees. When they established their craft brewery there were no other breweries in Durham. Andy used to work for many years in the catering sector while Rick has worked in several breweries where he learned

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⁵² www.ncbeer.org/brewery-map/

techniques and production processes.

What makes this brewery an interesting case study is mainly the financial result the firm has achieved in recent years. In fact, over the past five years TBC increased its turnover by 455%, moving from 45.000 USD to 250.000 USD (table 4.6).

Table 4.5: Triangle Brewing Company volume production from 2007 up to 2012

YEAR	PRODUCTION
2007	24,000 Lt.
2011	220,000 Lt.
2012 (estimated)	320,000 Lt.

Source: author's elaboration

Table 4.6: Triangle Brewing Company total sales in 2007 and 2011

YEAR	TOTAL SALES
2007	45.000 USD
2011	250.000 USD

Source: author's elaboration

Together with revenue, TBC has remarkably increased the volume of beer produced. Table 4.5 reports beer volume produced from 2007 up to 2012. Data shows how rapidly they grew over the last five years.

From 2007 up to 2011 TBC increased its production volume by 833%. In 2012 TBC's

production volume is expected to increase by 42% compared with 2011.

Entrepreneurial motivation

Several conditions motivated the start up of TBC. Rick and Andy's passion and their desire to drink a high quality beer, produced with traditional methods and characterized by a strong taste, are the main entrepreneurial motivations that led to the startup of the business. As big afficionados of Belgian beers, TBC's owners wished to brew beers following Belgian production methods.

The decision for establishing their brewery in Durham was driven by the fact that in 2007 there were no craft breweries in this city.

As stated by Andy and Rick: "We just wanted to work for ourselves and be able to make the kind of beer we like to drink.[...] There were no microbreweries in Durham when we opened. This was the main motivation for us to start in this area. We really liked the area and we wanted people to enjoy it too."

Apart from working in as many breweries, Rick Tufts, TBC's co-owner, in order to achieve knowledge and skills, has also attended a brewing school in Vermont, where he learned beer production processes and techniques.

Demand

TBC produces Belgian style beer. Before 2007 this kind of beer was not available in the Triangle market. TBC's initial target market consisted of young people between 21-35 years old. Over the last 5 years, this target has moved to 25-50 year old consumers. This happened driven by both price and cultural reasons. Craft beer is usually more expensive than industrial beer and it is often unaffordable to younger people.

On the other hand, craft beer has caught the attention of middle aged people, who are usually college educated, and willing to pay more to get a "special beer" produced with high quality raw materials and classic methods.

If we observe the production volume we can notice that the quantity of beer produced has exponentially increased over just 5 years, and the same happened for sales.

It is therefore clear that craft beer is experiencing increased demand.

In Rick's own words: "When we opened the brewery there was a broad interest in craft beers but consumer demand was not strong and consolidated because the market did not provide what consumers asked for. Demand and the craft beer industry grew up together. They have influenced each other."

Since 2007 and the establishment of Triangle Brewing Company and other breweries, the craft beer industry started gaining more supporters among consumers. As evidenced by the data, this movement has grown quickly.

In order to advertise their beers and bring consumers to the brewery, TBC's owners used to organize every Saturday afternoon a Triangle Brewing Company tour. From 1 pm up to 3pm Andy and Rick open the doors of their brewery to all who are interested in tasting their beer and in seeing how it is produced. Both "the testing" and tour are free of charge. According to owners, these tours are the best and most effective way to promote their beer and the best investment in terms of marketing strategy.

Access to assets and equipment

One of the biggest difficulties TBC's owners had to face regarded locating sources of financing. In 2007, craft breweries were not as popular as they are today. When Rick and Andy tried to obtain bank loans they encountered several obstacles. Banks had previously never

granted loans to establish a brewery and they did not know in which categories to insert this new business activity.

The initial investment required a large amount of money. Recent technological developments allowed small breweries to access resources and equipment, but production plants still remained expensive.

Even if these new production technologies adopted by both large and small breweries were similar, over the last few years the establishment of small breweries caused important changes in the manufacturing industry. Acquiring these technologies became easier and more affordable.

According to TBC'S owners: "Nowadays small breweries can access technologies such as packaging machineries. This sort of equipment became affordable over the last few years [...]. The rapid evolution of the craft breweries industry will lead to changes in the whole industry. Small plants will become more and more affordable and machinery manufacturers will provide new solutions for small breweries."

Laws and Regulation

According to Rick and Andy, recent changes in NC laws and regulation are one of the main reasons leading the establishment of craft breweries in the State.

Especially the "Pop the Cap" campaign gave beer producers the possibility of obtaining a new type of beer with a stronger taste.

Besides that, a recent law allowing producers to drink and sell beer on the production site increased the popularity and success of craft breweries.

Value chain analysis

Along the current value chain TBC's core business is represented by production activity. In 2007, when TBC was opened, distribution activity was managed in house. It favored the establishment of close relationships with retailers, especially because at the beginning the TBC sold its beer mostly in Durham.

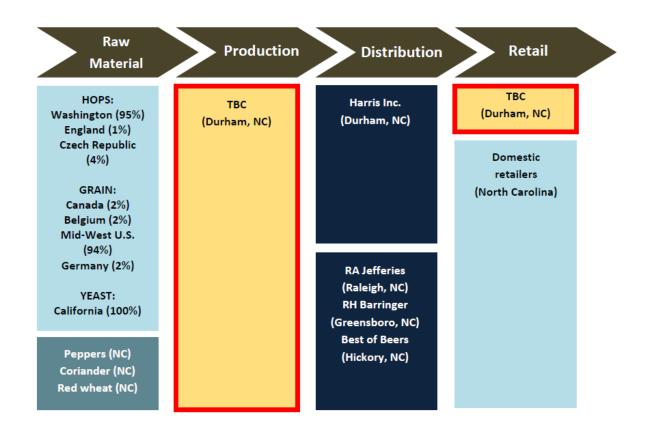
Between 2007 and 2012, the production volume increase required new distribution channels in order to reach new retailers.

As shown in 2012 value chain, TBC entrusts large distributors with the task of managing distribution. This has allowed TBC access to external resources. At the same time it required of TBC the development of new skills to establish and build relationships with external actors. In addition, TBC has to manage relationships with both domestic and foreign suppliers. Some of the raw materials TBC uses during the production process come from foreign Countries. Even if these raw materials are more expensive because of shipping costs, they are considered by TBC's owner the best raw materials available on the market, and that is why they are willing to pay more to obtain them.

RAW MATERIALS AND SUPPLIERS

The most important raw materials to produce beer are hops, grain, yeast and water. Most suppliers are located both in Europe and USA and they do not represent key actors along the value chain. Even if raw materials are extremely important, between Triangle and their suppliers there is a market relationship. Suppliers in this case are important but not irreplaceable. Similar raw materials can be provided by other suppliers located in the same Country because in Countries such as England or Belgium grain and hops' offer is high.

Figure 4.6: TBC's (2012) value chain





Among suppliers, the local ones play an important role. They provide producers special raw materials, often locally cultivated and produced. These ingredients, typical from North Carolina (sometimes even more specific areas), are used to give the beer produced a local identity. The proximity between producer and local supplier make possible to establish with them relationships based on mutual trust and the type of governance between them can be considered relational.

Table 4.7: Place of origin of TBC's raw materials

Raw Material	Place of origin
Hops	Washington (95%), England (1%), Czech Republic (4%)
Grain	Middle West of U.S. (94%), Belgium (2%), Canada (2%),
	Germany (2%)
Yeast	California (100%)
Special Raw Materials	Local suppliers (NC)

Source: author's elaboration

PRODUCTION

Production is carried out completely in the local brewery. The production phase is managed by Rick because of his extensive experience as brew master. Beers are not pasteurized and contain no additives.

Table 4.8 shows the range of beers produced by TBC. Some of them are seasonal while others are available all the year round. As we can see, every beer has a special taste and a combination of special ingredients that makes it unique.

In addition, some of the beers listed above contain special ingredients or raw material coming from North Carolina or are even locally cultivated, which give beers added value. According to the owners, the aim is "constructing our legacy upon the rich tradition of dedicated brewers who produce well-balanced and full-flavored Belgian and American-style ales. They use only the finest hops and barley malt and the only preservatives they need are their healthy portions of hops"⁵³.

Over the next years the brewery is going to increase its production volume by increasing plant productivity. The aim is to reach other markets in North Carolina in which craft beer demand is high.

Table 4.8: Range of beers produced by TBC

BEER	CHARACTERISTICS
Belgian-Style Strong Golden Ale	"Very lightly filtered, the Golden exhibits complex mouthfeel, strong malt flavors, a spicy hop presence and soothing alcohol warmth, followed by a clean, dry finish" (trianglebrewery.com)
India Pale Ale	"This IPA sparkles with effervescence and presents a floral, citrusy aroma and full hop flavor, while downplaying the bitterness and balancing out the malt. This beer has been specially dry hopped with 3 different hop varieties" (trianglebrewery.com)
Belgian-Style White Ale	"Brewed with a generous amount of white and red wheat that is grown locally in Scotland County, NC, and our own special blend of organic spices, makes Triangle White Ale complex in flavor without being overpowering or cloying" (trianglebrewery.com).

⁵³ www.trianglebrewery.com/history.html

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Bourbon Aged	"This Abbey beer features an immense head with a fruity nose coupled with a hint of	
Abbey Dubbel	oak, vanilla, and bourbon. Malty in the middle, the beer features a clean, oaky dry	
	finish with a slight hint of bourbon 7.2% abv" (trianglebrewery.com).	
Rufus Reserve Series:	Imperial Amber: "This strong amber ale (8.2%abv) has a strong malt presence that holds this brew together. IBUs of around 90 balance the brew which is dry hopped to add an invigorating citrus and floral aroma that lingers to the end while complementing all that malt" (trianglebrewery.com). India Pale Ale (100th Batch IPA): "At the request of you hopheads, we produced this I.P.A. with a deep golden color, plenty of hop bitterness balanced by malt sweetness. Because of the extensive dry hopping, there's a floral and citrus hop finish. It's then lightly filtered to maintain the appropriate body and flavor" (trianglebrewery.com). TRUB Smoked Porter: "This beer was a collaboration between Triangle Brewing Co. and our local homebrew clubs" (trianglebrewery.com). Mild Ale: "Brewed in the English tradition, this Mild Ale combines the finest domestic and imported malts to produce a chestnut-hued ale of unusual complexity. Subtle notes of chocolate, toffee and fine tobacco give this ale an enjoyable and satisfying "nutty" finish" (trianglebrewery.com) Habanero Pale Ale: "This spiced up Pale Ale is straight out of Durham! All of the peppers are locally grown in Farmer Needham's Pepper Patch. This ale is light in body with an extremely enjoyable balance between the sweetness and heat of the peppers while still remaining a flavorful beer" (trianglebrewery.com). Belgian-style Lambic: "Triangle Belgian- Style Lambic is a crisp and tart refreshing beer that draws its flavor from the unique fermentation character imparted by the yeast in the primary fermentation. The result is a flavor rich in fruitiness while the yeast fermentation also creates a sourness on the sides of the palate, reminiscent of a traditional lambic style" (trianglebrewery.com).	
Seasonal Selection	Best Bitter (Spring Seasonal): "Brewed with Rahr 2 Row Barley, this Best Bitter has a light to medium fullness and a slightly sweet, bready character that balances out beautifully with Palisade Hops" (trianglebrewery.com). Farmhouse Ale (Summer Seasonal): "This beer is lightly filtered with an earthy, spicy hop flavor and a beautiful rich creamy head" (trianglebrewery.com). Belgian-Style Abbey Ale (Fall Seasonal): "This classic-style Abbey beer features an immense head with a fruity nose and a generous body. Malty in the middle, the beer features a clean, almond dry finish and a slight alcohol warmth. More like a wine than a beer—it has a lot of the qualities of a fine red wine" (trianglebrewery.com). Winter Stout (Winter Seasonal): "An aromatic blend of chocolate and roast malts truly enhances this Stout. Our Stout is a solid, satisfying beer with a rich black over ruby hue, creamy tan head, coupled with an underlying espresso finish" (trianglebrewery.com).	

Source: trianglebrewery.com⁵⁴

⁵⁴ www.trianglebrewery.com/beers.html

DISTRIBUTION AND RETAIL

In 2007 when the brewery was established, distribution activity was managed by the brewery. They led distribution in-house because the small quantity of beer produced did not allow the covering of external distributors' costs.

In addition self-distribution helped TBC build strong relationships with retailers. Since TBC did not own a brew pub or a retail activity, these relationships were fundamental in the start-up phase in order to advertise TBC's beer.

Production and sales increase over the last few years has forced the brewery to rely on external distributors and concentrate the effort on the production activity.

Today Triangle Brewing Company has four large distributors that distribute beers in pubs, restaurants, and groceries in North Carolina. Durham is still one of the main markets that TBC serves and the high demand trend requires bigger production volume.

Between producer and distributors there is a very strong relationship. Distributors, in fact, play a strategic role along the value chain because they manage relationships with retailers and allowed brewers to reach new markets.

Harris Inc., the distributor located in Durham, in particular, plays a key role along the value chain and Triangle Brewing Company cannot afford to lose it since finding distribution channels is a difficult challenge. Not all distributors, in fact, are disposed to collaborate with craft breweries. The relationship between TBC and the other distributors can be considered less strong than the one with Harris Inc. This is due to both the fact that these relationships have been established more recently, and that the percentage of beer distributed by Harris Inc. is higher than the one distributed by the others.

It is evident that small breweries have built strategic relationships with their distributors in order to reach the widest possible market. Even if distributors play a key role, TBC still tries to

control distribution and retail, especially by choosing selling locations. The most important retail categories for TBC are pubs, restaurant and grocery stores. The 98% of TBC's beer is sold by retailers located in North Carolina. The remaining 2% is sold directly on the production site (especially on Saturday, thanks to the TBC's tour).

The establishment of relationships with external distributors implied a lower control on retailers. Even if the brewery's owners still carefully and personally select where their beers are distributed, relationships with retailers are today directly manage by distributors. That is why the type of governance identified between producer and retail is market, while at the beginning the self-distribution allowed closer relationships based on common values and mutual trust (especially because the first retailers were located in the same area where beer is produced).

4.3.3.2. Fullsteam Brewery

Establishment and recent development

Fullsteam, the second craft brewery established in Durham, was founded by Sean Wilson in 2010. He is not only the owner of the brewery but he is also one of the most important supporters and promoters of the 2005 "Pop the Cap" campaign and the 2009 "Permits Beer" law.

The brewery is located in one of the most recently reclassified areas of Durham and its establishment has strengthened the development of the whole district.

Fullsteam is at the same time a brewery and a pub. Beer is produced and consumed in the same place.

Besides the owner, the brewery counts seven full-time and fifteen part-time employees. The difference in number of employees between Fullsteam and Triangle Brewing Company is evident. TBC is almost completely focused on production while Fullsteam manages production, distribution, and retail (through the brewpub).

The success of Fullsteam is evident from the data concerning sales and production volume (table 4.9 and table 4.10). Similar to Triangle Brewing Company, Fullsteam sells 99% of its beer in North Carolina, especially in the Triangle area.

Table 4.9: Fullsteam total production from 2012 up to 2012

YEAR	PRODUCTION
2010	84.000 Lt.
2011	240.000 Lt.
2012 (estimated)	360.000 Lt.

Source: author's elaboration

Table 4.10: Fullsteam total sales of 2010 and 2011

YEAR	TOTAL SALES
2010	350.000 USD
2011	1.350.000 USD

Source: author's elaboration

Entrepreneurial motivation

According to the owner, the main reasons leading to the establishment of this business concern his passion for beer, his wish to make consumers excited about beer, and the will to build community-based local beer production.

Even though Mr. Wilson had never produced craft beer, he decided to open a business in the beer industry. Both his passion for craft beer and his involvement in campaigns to change NC's laws have persuaded him to establish his own business.

As others U.S. regions, South needed its beer made with its special raw materials and local ingredients. This is one of the aims leading to the establishment of Fullsteam brewery. As we can read on the Fullsteam website: "In the past few years, North Carolina's beer selection has flourished with beers around the world: Belgian dubbels, tripels, and quads; English bitters and barley wine, German lagers. Amazing craft beer from US breweries establishing regional traditions and styles: the West Coast IPA phenomenon. Hearty Wisconsin lagers. Experimental beers from the Northeast. But we have yet to develop a Southern craft beer identity. Fullsteam's mission is to craft this identity. To create a distinctly Southern beer style that celebrates the culinary and agricultural heritage of the South" 55.

Over the last few years U.S. Southern regions, especially in States like North Carolina, have been able to establish a new business which became soon a growing industry.

Demand

As already mentioned, Fullsteam was opened in 2010. At that time craft beer demand was already strong and widespread. Unlike TBC, Fullsteam entered in a market where consumers requirement were becoming more and more defined.

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⁵⁵ www.fullsteam.ag/about/

Durham represented a good location to establish the business, since in 2010 the only craft brewery of the city was TBC and demand was growing day by day.

In 2010 Sean realized that North Carolina beer's drinkers asked for more tasting beers than the ones available on the market. They were also interested in a craft beer concept of Southern style.

According to Fullsteam's owner: "It was essential to produce a beer linked with the territory, able to build community, and join people."

Nowadays demand has strengthened to the extent Fullsteam cannot sell its beer to all retailers that ask for it. That is why not only Fullsteam, but many NC craft breweries have planned to enlarge their plants over the next few years.

Access to equipment

The development of new technologies and the recent craft beer phenomenon have helped small breweries to gain to access tools and other needed resources to produce beer.

The initial investment still requires a large amount of money which can be recovered after several years of production. In fact, small production quantities cannot allow economies of scale.

In 2010, Fullsteam gained access to needed resources thanks to a mix of bank financing and private investment. The equipment Mr. Wilson purchased when he started up his business was not the best on the market, but it was what he could afford. Over the last months new investment provided Fullsteam with new and more efficient machineries.

According to Fullsteam's owner, the future aim is to become bigger and increase beer production volume. It will require new investment in additional and more efficient technologies and equipment.

Laws and regulation

As already mentioned above, Mr. Wilson is one of the most important promoters of the craft beer industry revolution in North Carolina.

"He founded and led both Pop The Cap and Permit Beer, two beer lobbying organizations that have opened up economic markets to North Carolina's craft beer industry"⁵⁶.

He says the law allowing breweries to sell beers on the production site represented, together with the campaign "Pop the Cap", the key change that permitted the develop of craft beer industry. Drinking beer on the site allows him to draw consumers on his production site and create a community identity. In contrast to North Carolina, there are States in the U.S. where is not allowed to drink beer on the site. In Georgia, e.g., craft beers producers are forbidden to sell beer on the site.

Laws and regulations differ from state to state. Over the last ten years, North Carolina has been one of the States that most changed its regulations in order to foster the development of craft beer industry.

Value chain analysis

Along the value chain, Fullsteam seeks to place itself as lead firm throughout the control of production, distribution, and, partially, retail. In the current value chain, Fullsteam's core business is represented by production, distribution and retail.

In 2010, when the brewery was opened, self-distribution allowed Fullsteam to control the shipping activity and establish close relationships with local retailers.

Today, Fullsteam reached Charlotte's market through an external distributors, Tryon. As a small brewery, it needed an additional external distribution channel to reach this new market.

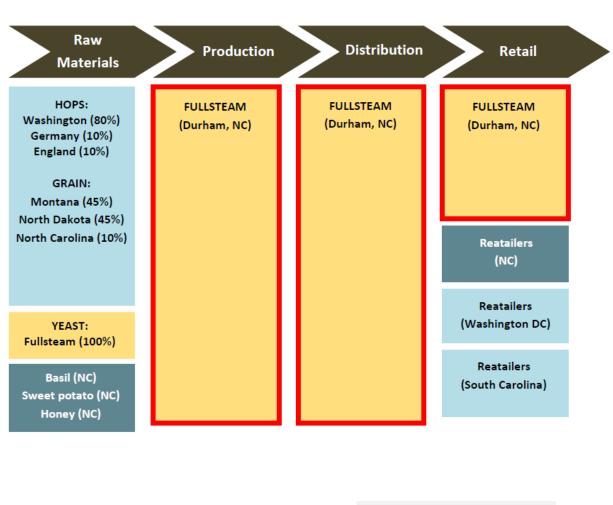
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⁵⁶ www.fullsteam.ag/about/

Only through this channel, in fact, Fullsteam gained access to a new market and new retailers.

New investment on external distribution channel will further modify the value chain. It will show the distribution activity management shared between Fullsteam and external distributors.

Figure 4.7: Fullsteam's (2012) value chain





RAW MATERIAL

Raw materials mainly come from suppliers located in USA. Between producer and its domestic suppliers there is a market relationship because the latest can be easily replaced with other suppliers who provide similar raw materials.

On the other hand, between Fullsteam and its local suppliers there is a stronger relationship. They play an important role along the value chain. In this case the type of governance can be defined relational. In fact, they provide special raw materials, often cultivated or produced only in specific areas, which cannot be easily replaced with other ones.

Table 4.11: Place of origin of TBC's raw materials

Raw Material	Place of origin
Hops	Washington (80%), England (10%), Germany (10%)
Grain	Montana (45%), North Dakota (45%), North Carolina (10%)
Yeast	North Carolina (100%)
Special Raw Materials	Local suppliers (NC)

Source: author's elaboration

PRODUCTION

Production is entirely realized in the brewery located in Durham and it is a hundred percent managed and controlled by Fullsteam.

The current volume capacity of the plant is 15 hectoliters, about 12 barrels, but demand for craft beer has grown fast. As mentioned above production volume has increased over the past

two years and it is increasing more in the future because, as with Triangle Brewing Company, Fullsteam is going to invest in order to increase production capacity and production volume.

As showed in table 4.12, Fullsteam produces four types of beers.

In addition, it produces three different seasonal beers and three beers made with ingredients harvested by the local community. The targeted use of NC raw materials gives Fullsteam beer a local connection which distinguishes it from all the other beers available on the market.

Table 4.12: Range of beers produced by Fullsteam

BEER	CHARACTERISTICS	
Fullsteam Southern Lager	"Call it "Southern Lager" or even "Lager" if you like, but we simply call this beer "Fullsteam." Our eponymous beer is quaffable yet complex, particularly for a lager. Caramel in color, with a woodsy aroma and biscuity malts" (fullsteam.ag).	
El Toro Classic Cream Ale	"El Toro is a lager-like classic cream ale — yet another American original. This easy-drinking "beer beer" has a 100% North Carolina grain bill (90% Riverbend Malthouse six-row barley, 10% Lakeside Farms corn grits)" (fullsteam.ag).	
Carver Sweet Potato	"North Carolina is the largest U.S. producer of sweet potatoes. In our quest to work with local Southern ingredients as much as possible, the humble sweet potato is an obvious choice. Perhaps less obvious: our decision to avoid cloying spices that would only serve to mask the savory-yet-delicate flavors" (fullsteam.ag).	
Working Man's Lunch	"A tribute to the Southern tradition of an RC Cola and a MoonPie. We brew this beer with biscuity malts, vanilla, and chocolate nibs from Raleigh's own Escazu Artisan Chocolates. But instead of using a traditional, dry English or Scottish ale yeast, we get zany and brew with a German (Weihenstephan) yeast strain" (fullsteam.ag).	
Seasonal beers	Hogwash: "We house-smoke malted barley over hickory wood, imparting a sweet, subtle smoke to our hickory-smoked brown porter" (fullsteam.ag). Summer Basil: "A farmhouse ale brewed with Saison yeast and North Carolina basil. We add six pounds of whole-leaf basil per batch, yet the beer retains a subtle basil aroma and taste that favors nuance over obvious. The beer pours with a creamy, white head and finishes with notes of lemon, pepper, and (prepare yourself for precious food terminology) Bouquet Garni" (fullsteam.ag). Spring IPA: "Our Spring IPA is brewed with citrusy American hops and 800 pounds of Florida kumquats" (fullsteam.ag).	

FIRST FROST winter persimmon ale: "Sweet and savory, with natural notes of cinnamon and apricot, the orange-globed persimmon fruit truly is heavenly" (fullsteam.ag). PAW PAW Belgian-style golden ale: "Paw Paw (Asimina triloba) is the largest edible tree fruit native to North America. The nondescript trees grow in wet, shady groves, often along the banks of rivers. Paw paws taste like mango-meets-butterscotch-meets-banana. But the fruit's notorious short shelf life keeps them from being commercially viable. We forage for wild paw paws around Jordan Lake, and a few North Carolina foragers who know the fruit bring us their harvest" (fullsteam.ag). Surprise Fig Beer: "Thanks to our local foragers, we collected over 300 pounds of figs in the summer and fall of 2011. We're actually not going to brew a beer for this

(fullsteam.ag).

Source: fullsteam.ag⁵⁷

fall or winter; instead, we're planning an oak-aged surprise for the following year"

DISTRIBUTION AND RETAIL

Differently than TBC, Fullsteam directly controls the whole distribution process of the beer it produces.

According to Mr. Wilson, to collaborate with large distributors is very expensive. In addition, when production volume is limited in quantity, profits do not allow covering distribution costs.

Until now Fullsteam has decided to manage its own distribution because its sales were mostly in Durham and because it also managed in house most of the retail activity thanks to the pub located inside the brewery.

But plans are already underway to increase production volume and reach new markets. In a couple of months, around January 2013, Fullsteam will start selling beer in the state of Georgia. This will require the search for a distributor familiar with Georgia's market and retailers.

⁵⁷ www.fullsteam.ag/beer/

In addition, over the last three months, Fullsteam started selling beer in Charlotte. These new market required the search for external distribution channels able to manage relationships with retailers. The value chain shows that distribution activity is now managed both by Fullsteam (98%) and an external distributors (2%). The type of governance between Fullsteam and its distributor can be considered market, because the brewery still manage almost 100% of the entire distribution activity.

Fullsteam's value chain will change, therefore, in 2013; the distribution activity will be shared with external distributors because Fullsteam's owner decided to enlarge the market and sell his beers also in Georgia. This new market will require new investment on external distributors and the development of new capabilities in order to manage these relationships. Many variables will influence the relationship between producer and distributors. It is rational to presuppose that, as happened for Triangle Brewery Company, distributors will play, at least at the beginning, a key role in the new value chain.

Currently, the main retail location is the pub located inside Fullsteam brewery. In the brew pub is sold the 50% of the entire production volume in terms of liquid, which represents the 70% of the entire revenue.

As already mentioned above, the possibility of selling beer on the site represents one of the most effective advertising strategies to capture clients, although.

Fullsteam beer is available in grocery stores, restaurants, and pubs.

In addition, Fullsteam beer is the only beer sold in Durham farmers' market, (which "is an all local, producer-only market" which takes place every Saturday morning in Downtown Durham).

Retailers are located in North Carolina, Washington DC, and South Carolina. In the craft beer

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⁵⁸ www.durhamfarmersmarket.com

industry the relationship between retailer and producer seems to be more important than in other food and beverage industries. Craft beer is a product that needs to be introduced and, especially in the start-up phase, it required consumers to be educated.

Therefore, for beer producers it is very important that retailers be informed and capable of 'educating' about craft beer. The increase of production volume and number of retailers, decreases producers' control on retail activity, especially when distribution is managed by external actors.

4.3.3.3 CRAGGIE BREWING COMPANY

Establishment and recent development

Craggie Brewing Company (CBC) is a small brewery located in Asheville, North Carolina, founded in 2008 by Bill Drew. He is the major shareholder with 90% of the company, and the remaining 10% is held by a business partner. In addition, the brewery has five employees.

2008 represents a key year not only for CBC but for Asheville as a whole, being also a landmark for the craft beer industry. Beginning 2008, in fact, Asheville has collected several acknowledgements, including two outstanding US beer city award (2010 and 2011).

CBC is the ninth craft brewery established in Asheville.

Since its establishment, CBC it has been experienced consistent increases both in sales and production volume (Table 4.13 and Table 4.14).

As showed in table 9 and table 10, between 2008 and 2011sales increased by 500% and production volume increased by 420%.

Table 4.13: Craggie Breweing Company total sales from 2008 up to 2012

YEAR	TOTAL SALES
2008	20.000 USD
2011	120.000 USD
2012 (estimated)	120.000 USD

Source: author's elaboration

Table 4.14: Craggie Brewing Company production volume from 2008 up to 2012

YEAR	PRODUCTION VOLUME
2008	25.000 Lt.
2011	130.000 Lt.
2012 (estimated)	130.000 Lt.

Source: author's elaboration

Entrepreneurial motivation

CBC's founder has been working for several years in other, breweries first in Atlanta and then in Asheville. In 2008, after years of experiences as brew master, he decided that it was time to open his own business. Having majored in archeology, he retained a strong interest in the history and different styles of his craft, by also exploring different brewing techniques.

As stated by Mr. Drew: "[...] I do love beer, but I am more into craft beer styles and their history"

His archeology studies in Europe gave him the possibility to travel and discover European beers, especially Belgian and German ones.

Over the past few years he has improved his tasting abilities and came to the decision to open his own brewery.

The main motivation leading to the establishment of his own business is thus represented by this passion for beer as a beverage as well as his love variety variety of artisanal crafts to be cherished, mastered and passed on to future generations.

Demand

The strong demand for craft beers in the past few years has undoubtedly been one of the main reasons driving Drew's decision for opening a brewery. His past experiences as an employee allowed him to test the pulse of the shifting needs and tastes of a good sample of consumers, shaping his perception of the actual demand for craft beers.

"Asheville was a good place to establish a brewery because both demand and craft beer culture were strong", Drew said.

Even though 2008 represented a difficult year both financially and economically, it is due to brewers like Bill Drew that Asheville has known a rapid growth since, and his CBC stands as a sort of archetype, having started with a modest level of production that grew quickly and is still growing to this day.

Access to assets and equipment

In 2008, Drew bought most of his machinery from other breweries, especially those based in Atlanta, that had decided to upgrade and buy new equipment. This gave him the possibility of acquiring these assets at a lower price. It is for this reason that he was not forced to apply for a bank loan, which could have been a serious issue for such a small business. Small breweries,

back then, were not regarded as a secure investment for bank.

Second hand market is not very common in craft beer industry. Breweries usually purchase brand new plants which are still very expensive. While still working with other breweries, Drew had the chance to create a network of trusted contacts that were able to assist him in economically obtaining resources such as equipment and technologies.

The technology used to produce beer has stood almost unchanged for hundreds of years. What has been changing mainly concerns some specific parts and components, which have became increasingly more efficient and more affordable even by small breweries.

In Drew's words: "[...] the basic technology to produce beer has been around for a lot of years and it won't change. New technologies allowed the creation of more efficient and more technology-based machinery."

Nowadays, Drew is still using the same basic plant he bought in 2008. He will probably need to buy new components and new machinery if he wants to increase his beer production volume.

Laws and regulation

As already underlined by the aforementioned brewers, "Pop the Cap" represented the most important change in terms of beer-related law in North Carolina over the past several years. In this particular case it helped the establishment of Craggie Brewing Company by allowing Drew to produce beers with a alcohol percentage higher than the industrial ones.

In his opinion, the new laws about self-distribution (see paragraph 4.3.1) have also played a key role in developing and encouraging not only his activity, but the industry in general.

Value chain analysis

Along the value chain CBC's core businesses are production and retail.

On the supplier side CBC purchases raw materials from first-tier domestic suppliers.

All the raw materials used by CBC are imported by U.S. distribution from foreign suppliers, especially based in Germany, Belgium and England. They represent the second-tier suppliers.

The following value chain only represents first- tier partners.

As will be analyzed in the following paragraph, CBC is able to obtain these raw materials thanks to big U.S. distributors that mainly act as wholesalers. CBC does not have direct relationships with foreign suppliers but only with big distributors.

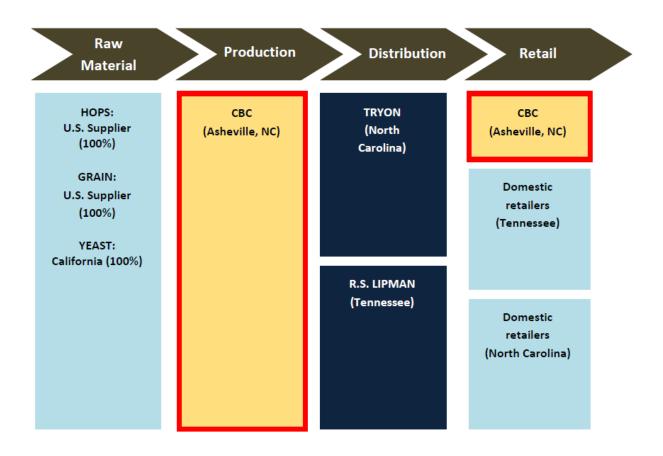
In 2008 and 2009, when Drew decided to start up his own business, CBC could afford to manage in-house distribution; when production volume increased it had to look for larger distributors in order to increase the number of retailers and reach new markets. Bill has since entrusted distribution to two large wholesalers, one based in Tennessee and the other in North Carolina.

Retail activity is in part managed by CBC directly thanks to their own brew pub, and in part it is entrusted to external retailers like pubs, grocery stores and restaurants. CBC's beers are sold both in North Carolina and Tennessee.

RAW MATERIALS AND SUPPLIERS

CBC obtains raw materials from U.S. suppliers (table 11). They buy them entirely from big suppliers located in the U.S. All of these raw material are imported by U.S. suppliers from foreign suppliers located in Europe.

Figure 4.8: CBC's (2012) value chain





CBC has decided to purchase most of its raw materials from Europe because of their higher quality standards, but it does not maintain direct contact with its suppliers. CBC holds this particular kind of raw material in high regard, but the quantity produced in Europe allowed them to built market relationship with suppliers. Nevertheless, suppliers could be replaced with others selling similar goods, should the current ones face difficulties in providing according to CBC's needs.

Even if they are more expensive because of shipping costs, the higher quality of these materials finds no match in U.S. based production.

Table 4.15: Place of origin of CBC's raw materials

RAW MATERIALS	PLACE OF ORIGIN
Grain	England (40%), Canada (20%), Belgium (20%), Germany (20%)
Hops	Germany (50%), England (50%)
Yeast	England (50%), Belgium (25%), Germany (25%)

Source: author's elaboration

PRODUCTION

As the real core business of CBC, production is entirely based in the brewery located in Asheville.

The plant has a production capacity of thirty hectoliters.

Drew is both the major shareholder and the brew master. Having built strong expertise in methods and techniques through the years spent in other breweries, he is now able to experiment with new and more refined beer production styles.

As already underlined above, his passion for European beer styles has pushed him to learn the three major traditional crafts, most notably the ones developed in Germany, Belgium and England.

As showed below (table 4.16) among beers produced there are some called "Past styles". This category includes classic style beers studied by CBC in order to give vent to brew master creativity.

DISTRIBUTION AND RETAIL

In 2008 CBC used to manage in-house distribution and it allowed to build close relationships with retailers that were mainly located in Asheville.

Today the brewery has two large distributors, one in Tennessee and one in North Carolina and the relationship with them is crucial for craft breweries because they represent the channel through which to reach the market. Moreover, the externalization of the distribution activity enable CBC to concentrate its effort on the production activity, which today represents the core business of the brewery.

According to Bill Drew, there is a inter-dependent relationship between him and his distributors.. The recent and super-fast growth of craft beer industry has given more contractual power to small breweries. The craft beer industry is still comparatively small, but its market share is expanding at a very fast rate. Distributors have thus acknowledged the large demand for craft beers and now consider these breweries as valued clients and treat them as assets.

Table 4.16: Range of beers produced by CBC

BEER	CHARACTERISTICS	
Burning Barrel	"Brewed with chipotle peppers, fermented with a Belgian yeast strain, and aged on bourbon oak chips" (craggiebrewing.com).	
Dubbelicious	"Barley, Rye, Wheat and Oat malts are brewed with Belgian candy sugar and then fermented with a Regional yeast strain" (craggiebrewing.com)	
Antebellum Ale	"An 1840's American recipe using water, yeast, molasses, ginger and spruce tips. The ingredients from the historical drink have been adapted into a flavorful modern day beer incorporating malt and hops" (craggiebrewing.com).	
Toubab Brewe	"Organic Munich and Pilsen malts are bittered with Organic Hallertau Tradition. This unfiltered Bavarian lager is crisp and malty with a slight hoppy flavor" (craggiebrewing.com).	
Yo LA Mango IPA	"American IPA dryhopped with fresh mangoes, Citra, & Amarillo hops" (craggiebrewing.com).	
Quadruppelicious	"A Belgian-Style Quad brewed with molasses and Belgian candy sugar" (craggiebrewing.com).	
PAST STYLES:	Germinator Doppelbock: "With hints of alcohol in the nose to complement the clean, malty flavor of this "liquid bread" beer; Munich and Pilsen malts are lagered for months to produce rich, caramel undertones and a slight fruity finish" (craggiebrewing.com). Herkulean IPA: "Munich, wheat and chocolate rye malts are blended for a dark color and unique body in this Beer City Brew. We infuse Germany's Hallertau Herkules hops at each stage of the brewing process for a smooth floral aroma and a powerful spicy flavor" (craggiebrewing.com) Meet Your Maker: "A smooth English-Style Strong Ale with hints of First Gold hops and warm notes of toffee and raisins" (craggiebrewing.com). Swannanoa Sunset: "Organic Munich and Pilsen malts are double hopped with Organic Hallertau Tradition. This unfiltered German brew is crisp and clean like a lager, but malty and hoppy like an ale" (craggiebrewing.com). Battery Hill: "Organic Pale and Rye malts are hopped with Organic First Gold and paired with a British yeast blend for a tart malty taste with hoppy hints of the English countryside" (craggiebrewing.com). Test Batch #1: "Really, our first commercial batch (brewed in Nov. '09) was so good that we're keeping it in the rotation. Pale malt, an English blend yeast and German hops were combined and Craggie's pale ale was crafted with a tart bitterness and lingering herbal hoppyness" (craggiebrewing.com).	

Source: craggiebrewingco.com⁵⁹

⁵⁹ www.craggiebrewingco.com/home/?page_id=3

Despite of this, distributors still play a key role along the craft breweries' value chain.

In regards to retail activity, 25% of the total beer produced by CBC is sold directly in the brew pub located inside the brewery. It represents a precious source of income and advertising at the same time.

CBC's beer is also sold in grocery stores, restaurants and pubs.

Drew is thinking about the possibility of selling his beers in Georgia and South Carolina, although has not been planned yet any investment. This move will require new distributors in these states and the establishment of new relationships with them.

4.3.3.4 WEDGE BREWING COMPANY

Establishment and recent development

Wedge Brewing Company (WBC) was founded in 2006 in Asheville by Tim Schaller. It is located in the middle of the River Art District area. Not far from downtown Asheville, the District consists of old warehouses and buildings restored and refurbished, and recently turned into art galleries and artists' studios. It is a new and very dynamic area where people from Asheville like to spend time in art activities and relaxation, far from the traffic of the city.

Wedge's decision to locate in this area has turned out to be a winning bet in taking advantage of this flow of people.

According to Wedge's owner, in fact, this location represents one of the reasons leading to the success of the brewpub. It gave him the ability to become a strong retailer and compete with the other brewpubs of the city.

The brewpub and retail activity has become central for WBC: 90% of total Wedge beers are

sold directly in this location.

The total number of employees working into the brewery and the brewpub is seventeen: two full time and fifteen part time.

Since the first year both production volume and sales have notably increased (table 4.17 and table 4.18).

Official data are not yet available for 2012, but both sales and production volume are estimated to be approximately the same as 2011.

Table 4.17: Wedge Brewing Company total sales in 2006 and 2011

Year	Total sales
2006	500.000 USD
2011	800.000 USD

Source: author's elaboration

Table 4.18: Wedge Brewing Company production volume in 2006 and 2011

Year	Production volume
2006	95.000 Lt.
2011	143.000 Lt.

Source: author's elaboration

Entrepreneurial motivation

Schaller decided to open a his own brewery because he felt the necessity to make making high quality beers available for beer aficionados, which were not previously provided by the market.

In Scahller's own words: "We wanted people to stop drinking bad quality beer. [...] I am over 65 years old. I have not started this business to become rich. I did it because I wanted to open my own business and offer people a product they could appreciate."

Schaller is not an expert in brewing beer. He has done a variety of jobs in his life, but brewing was not one of them.

When he decided to open the brewery he needed a good brew master. That is why he called Carl Melissas, an expert brew master who has been working in the beer industry for many years. He was already renowned in the Asheville area and he represented a high probability of success.

Both Carl and Tim consider craft beer-making as a form of art, and that is why they feel so proud to be working within the River Art District of Asheville.

Demand

In Asheville in 2006, the demand for craft beer was strong but the breweries were still few. Thus, demand has undoubtedly been one of the main reasons leading to the establishment of Schaller's business. The demand trend was not only about craft beer, but also about a new lifestyle. People in Asheville were tired of big companies' products and had developed a preference for local and craft products. The choice of establishing the brewery in the River Art District represented a way to satisfy this demand for craft product.

In Schaller's opinion: "Our success is due to our location and our style, which meets people

requirements about a new lifestyle."

The market for craft beer is not a single demographic. According to WBC's owner, his customers are multigenerational. They range from young people to families to elderly people.

Access to assets and equipment

WBC's equipment was purchased from a brewery located in Jacksonville, Florida, in the process of shutting down business. As seen in the case of Craggie Brewing Company, the acquisition of second hand equipment lowered initial investment costs.

To secure money and resources to buy machinery, Schaller turned six private investors, and a secured loan from a bank.

Six years later the core equipment has not changed: manufactured in Canada, it is, in Schaller's opinion, "[...] one of the best one on the market. In 2006 we could not afford to buy a brand new one."

Most of the new technologies from China, on the other hand, come at both a lower price and a lower quality, and do not make the brewery's first choice.

Laws and Regulation

As in the previous U.S. case studies, Schaller underlined the importance of the "Pop the Cap" campaign for the whole craft beer industry.

In addition to this, he considers laws regarding self-distribution as one of the factors leading the start up of small craft breweries in North Carolina. As underlined in paragraph 544 North Carolina distribution laws, recently modified, have facilitated the establishment of small businesses making it possible for them to manage their own distribution or to build straightforward relationships with external distributors.

4.3.3.4.2. Value chain analysis

As showed in above value chain, WBC's core businesses are represented by production, distribution and retail.

Beginning in 2006, Schaller had decided to keep in-house both distribution and a big part of the retail activity. WBC's value chain has not changed in these years.

According to the owner, there are no plans of expanding the brewery or increasing production volume in the future.

On the supply side, most of the raw maw materials come from suppliers located outside the U.S., especially grain suppliers. These raw materials represent an essential part of the production process and WBC looks for the best raw material available on the market. The relationships WBC established with foreign suppliers can be defined as a market relationship because they can be replaced with other foreign suppliers selling similar quality raw materials. The same can be stated about domestic suppliers.

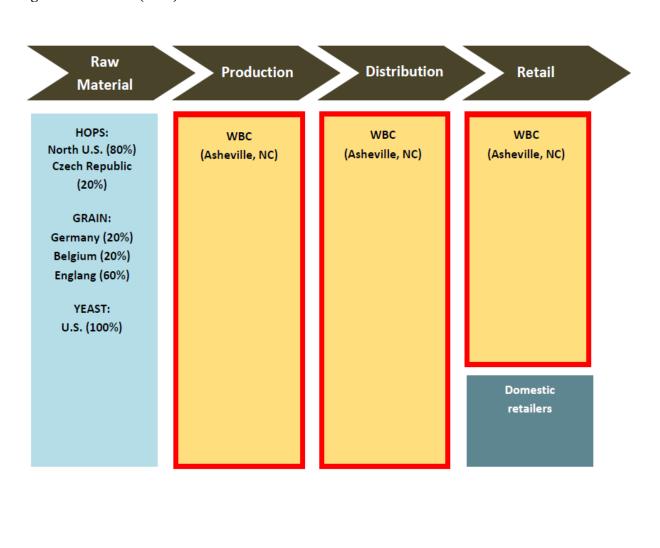
Retail activity is mostly managed by Wedge Brewing Company. All the other retailers along the value chain are located in Asheville.

RAW MATERIALS AND SUPPLIERS

Raw materials used by Wedge come both from domestic and foreign suppliers.

Concerning grain it comes 100% from Europe, especially England, Germany, and Belgium. Even if the grain bought overseas is more expensive, Schaller and his brew master consider the quality of European ones worth the difference in price.

Figure 4.9: WBC's (2012) value chain





They try to make beer as authentic as possible, following traditional methods and European recipes. They would buy local raw materials if they were as good as the foreign ones.

Regarding hops, they come both from Czech Republic and U.S.A., while 100% of the yeast is bought from U.S. suppliers.

The relationship they establish with their supplier is a market relation. Foreign suppliers can be replaced with other suppliers located in the same country and able to provide similar raw materials.

Table 4.19: Place of origin of WBC's raw materials

Raw material	Place of origin
Grain	England (60%), Belgium (20%), Germany (20%)
Hops	U.S. (80%), Czech Republic (20%)
Yeast	U.S. (100%)

Source: author's elaboration

PRODUCTION

The production process is entirely realized in the brewery located in Asheville. As already emphasized above, beers are brewed by Carl Melissas, who is the brew master of Wedge Brewery. He used to work for several years in Georgia, where he developed his knowledge and skills about beer.

WBC's aim is to produce classic beers, following traditional methods. As showed above (Table 12) most of their beers are produced following Belgian, English or German recipes.

WBC's plant allows them to produce about 1200 barrels of beer every year (about 150.000 liters).

They could produce and sell even more volume of beers, but at least for the moment, Schaller does not intend to increase production.

Table 4.20: Range of beers produced by WBC

	"English Chala India Dala Ala Maria Ottan 2 ann Canadian Hanna Malt and
	"English Style India Pale Ale, Maris Otter 2-row, Canadian Honey Malt and
Iron Rail IPA	Belgian Crystal. Centennial, Kent Golding, and Cascade are added five times
	during the process, including Dry Hopping" (wedgebrewing.com).
	"It's what American Pilsner was originally meant to be. A perfect balance between
Julian Price Pilsner	european malts and noble european hops. Also, this brew is a lager, which means
	cooler fermentation temperatures, which allows the malt and hops to shine
	through. A single decoction is utilized for added maltiness" (craggiebrewing.com).
	"American Style Pale Ale. Pale Malt and a portion of Rye malt and some very
Payne's Pale Ale	light crystal. Cascade hops are used in the brewing process with East Kent
, and the second	Golding hops after fermentation, also known as dry hopping"
	(craggiebrewing.com).
	"Riverbend Malthouse supplies the 6-row pale malt and carolina rye malt, while
North Carolina Pale	Echoview Farms supplies the cascade hops for dryhopping in this North Carolina
1 (01 011 0 01 0 1 0 1 0 1 0 1 0 1 0 1 0	sourced American Pale Ale. A brazen version of our popular Payne's Pale Ale, this
	APA is more upfront and unabashed" (craggiebrewing.com).
	"Brewed with 2 row Pale Malt, Rye Malt, and a small amount of Black Malt (just
Derailed Hemp Ale	enough to give it the color), and Hopped with Cascade Hops to bring out the
-	earthy character of the 150 lbs of toasted Hempseeds added in the Mash Tun"
	(craggiebrewing.com).
	"English Style Robust Porter with a West Coast twist, Carob and Maple are added
Community Porter	into the Kettle. Kent Golding Hops are added just to balance the Malt Sweetness.
	Organic Pale, Munich, Chocolate, and Caramel malts comprise the Grain Bill"
	(craggiebrewing.com).
Witbier	"Belgian style wheat beer, spiced with coriander and orange peel. Raw wheat
	berries, malted wheat, pilsner malt and a portion of oats make up the grain bill"
	(craggiebrewing.com).
Super Saison	"Belgian Farmhouse Ale. European malts, Styrian Golding Hops, and spiced with
_	coriander and orange peel. A wild yeast (brettanomyces) and dry-hopped make for
	a very complex and refreshing beverage" (craggiebrewing.com).
Belgian-Style Abbey Ale	"A Fruity, Rich, Monastic Style Beer. Deep brown colored with a generous long
	lasting fine bubble head" (craggiebrewing.com).
	"Belgian Strong Golden Ale. Wicked and Dangerously drinkable, this brew is
Golem	made with Belgian pilsner malt, and small portions of wheat, oats, and corn, true
	Belgian candy sugar, and a variety of European Noble Hops including Saaz"
	(craggiebrewing.com).

Hellesbock	"German style lager, light in color and strong in alcohol and flavor, but much hoppier then the traditional one. All German malts are mashed with a single decoction and Hallertauer Mittelfrüh Hops are used throughout" (craggiebrewing.com).
"Sticke" Altbier	"Originally from Düsseldorf Germany, this copper-brown colored old-style German ale is clean (lager like), and incorperates dark malts, but it isn't roasty. Altbiers are Dry, not Sweet, have a firm body, and are balanced with a hoppy bitterness (the beer is dryhopped)" (craggiebrewing.com).
Doppelbock	"A German. Dark, Double Strength and Cool Fermented Lager. A Labor Intensive Decoction Mash and Noble Hops make this a Very Authentic Brew" (craggiebrewing.com).
The 3rd Rail	"This copper colored strong ale is the Iron Rail on steroids. With twice as many hops as the Iron rail, it clocks in at about 100 IBUs! (International Bittering Units)" (craggiebrewing.com).
Oatmeal Stout	"A classic english-style stout. Rich in body and silky smooth with a dry finish. Pushed with Nitrogen for a creamy-mouth feel" (craggiebrewing.com).
Vadim Bora Russian Imperial Stout	"Originally created for the Russian royal family by English Brewers. With the untraditional addition of 168 lbs. of raspberries, this brew is Intensely Decadent" (craggiebrewing.com).

Source: wedgebrewing.com⁶⁰

DISTRIBUTION AND RETAIL

As shown in the value chain, distribution is managed in-house by WBC. The main reason is that 90% of the total amount of beer it produces is sold directly in Wedge's brew pub. The other 10% is distributed in pubs and restaurants located in Asheville.

WBC sells most of its production directly through its own retail space: the brewpub is located in a massive open space in the back of former warehouse facing the railway tracks, where customers of all ages find an ideal meeting place. The River Art District both provided a location and benefited from the presence of Wedge Brewing Company and the brewpub: the brewery has since become its main social hub.

⁶⁰ www.wedgebrewing.com/brews/

Shaller's initial idea was to establish a small business and he still wants to keep his brewery small. He does not need large distributors. He preferred to invest money in his retail activity, which became as important as production. He in fact competes effectively against other craft breweries because of beer, and with other retailers located in Asheville.

Together with production, retail activity increased in importance over the last years five. The location of his brew pub made it one of the most popular and appreciated places in Asheville.

Concerning other retailers selling his beers, Schaller has a friendly relationship with all of them. He has chosen carefully where to sell his beer because he wants to be sure that it is well advertised and presented. That is why in the value chain relationship between Wedge brewery and retailers is defined as relational; it is a long term relationship, built on mutual trust.

CHAPTER 5:

'INTERNATIONAL COMPARATIVE ANALYSYS BETWEEN ITALY

AND U.S.'

Over the last years, U.S. and Italy have been protagonists of craft beer industry renaissance. In both Countries, the number of craft breweries increased insomuch as they have been able to alter the beer industry structure. Both Italian and U.S. beer industry, in fact, have always been concentrated in the hands of few Multinational Corporations, which used to hold almost the entire market share.

In U.S. craft beer movement started at the beginning of 1980s, while in Italy it appeared around the second half of 1990s. That determines that Italy and U.S. are characterized by a different level of craft beer industry development, which causes many differences between the two Countries.

At the same time, Italian and U.S. craft brewers also show many similarities.

Table 5.1 shows case studies context and the main features.

Case studies have been selected in order to investigate dynamics that led to the establishment of craft breweries and to analyze their current value chain configuration.

Even if located in different Countries, they have been selected by the author because of similarities concerning year of foundation and size and dimension (table 5.1); all of them were founded over the last ten years and because of their production volume, they can be considered small and medium size breweries.

Table 5.1: Case studies context

		North	Carolina		North East Italy			
Case context	FS	ТВС	WBC	СВС	32	BABB	Morgana	Valscura
Year of foundation	2010	2007	2006	2008	2006	2004	2008	2007
Number of employees	22	4	17	5	7	1	2	3
Sales (First year)	350,000 USD	45,000 USD	500,000 USD	20,000 USD		60.000 €	80.000 €	90.000 €
Sales (2011)	1,350,00 0 USD	250,000 USD	800,000 USD	120,000 USD		250.000 €	122.000 €	175.000 €
Production volume (first year)	84.000 Lt.	24.000 Lt.	95.000 Lt.	25.000 Lt.	26.000 Lt.	20.000 Lt.	30.000 Lt.	22.000 Lt.
Production volume (2011)	240.000 Lt.	220.000 Lt.	143.000 Lt.	130.000 Lt.	210.000 Lt.	80.000 Lt.	40.000 Lt.	35.000 Lt.

Source: author's elaboration

The following paragraphs will analyze the dynamics (the same listed in the case studies analysis) that allowed the establishment of craft breweries both in Italy and in U.S., and will underline the main differences and similarities between the two Countries.

5.1 The rise of a new entrepreneurial figure

Case studies analysis highlighted as main entrepreneurial motivation the entrepreneurs necessity of drinking and offering a new type of beer. Both Italian and U.S. market, in fact, before craft beer movement birth, only provided industrial beers, which were light and similar in taste. The aim of these new entrepreneurs was to produce not standardized and industrialized products, but a new type of beer, which was the expression of their personality and creativity. Most of them started to produce their own beer at home and became part of the movement called home brewing. Then they decided to convert their passion into an entrepreneurship project switching from the unsatisfied consumers condition to the entrepreneurs one.

Craft beer industry highlighted a new entrepreneur figure; instead of looking for opportunities and profits, brewers opened their business driven by their passion and desire of sharing new values with their community. They, in fact, created strong relationships with local stakeholder in order to access resources and find right partners to share values with, and shaped their business mixing local and global dimension (table 5.2).

As underlined in the case studies analysis, the process that led to establishment of a craft breweries is often common to both Italian and U.S. brewers.

Certainly Italy and U.S. are very different Countries.

Italy used to produce high quality products for food and beverage industry since a lot of time. It created and exported the "Made in Italy" brand, famous all over the world, as quality product guarantee. That is why craft beer industry represents a revolution in the beer industry, but it is close to the idea Italian people and producers used to have about food and beverage. On the contrary U.S. do not present the same attitude. U.S. craft beer movement represented a

cultural movement that aimed to fight against standardized products and Multinational

Corporations. Its power and echo is even more significant because it originated in U.S., where mass culture has born.

Both in Italy and U.S. brewers have been able to experiment new and creative type of beers, using, during the production process, a mix between traditional and special raw materials. These special raw materials are often cultivated and specifically connected with the territory where beer is produced.

More specifically, in U.S., craft beers become a community icon. Each state produce its own beers and used them to build to create and emphasize community values.

In North Carolina craft beer movement became a way to incline people towards a new idea of community, based on common and genuine values. U.S. brewers, through craft beers, communicate their belonging to a specific territory and their social identity.

Similarly, they use the physical space of their firm to attract people and, especially through brewery tours or easily using that space as a pub, they create interaction moments between people.

In addition, the place they choose to establish their brewery is often located in the center of the city (Triangle, Durham), or in areas where city can be lived and observed from another point of view (Wedge Brewing Company, River Art District, Asheville), or in areas where their establishment can contribute to the requalification of the entire block (Fullsteam, Durham). That gave plants a new connotation; they are not only places where brewing, but also meeting places (see table 5.2)

In Italy craft beer phenomenon is less community oriented than U.S. one. Plants are often located in industrial areas and the most important entrepreneurial aim is producing high quality products. The Italian entrepreneurs ability is highly visible in the careful they implement during the production process and in their creativity.

5.2 Demand evolution

It is evident from case studies analysis, both the Italian and the U.S. ones, that when craft beer movement started demand was weak and not mature.

As already underlined, craft beer movement is characterized by values that concern not only beer itself, but it is part of a greater movement that expresses new needs.

At the beginning, people did not ask for craft beers; they asked for new life styles characterized by genuine values. These new values regarded food and beverage industry in general, but many other industries as well. Over the last years, people reacted against the uncontrolled capitalism ideology and the finance supremacy, which culminated in the 2008 financial and economic crisis.

Especially people living in the Western part of the world, characterized by mass culture and consumerism, started to feel the necessity of a new lifestyle. New demand trend is oriented toward sustainable, authentic, and personalized products (Finotto and Micelli, 2012).

Craft beer industry represented a way to react against Multinational Corporations and consumerism. The careful used during the production process, the selection of the best raw materials, the new craft breweries human scale dimension, and the story behind each beer made craft beer industry and brewers one of the symbols of the consumers search for new values, both in Italy and U.S.

These common feelings have been intercepted by Italian and U.S. brewers that educated consumers to a new product and still keep on doing that.

Today, in U.S., craft beer demand is more mature than in Italy. That is probably due to the fact that in U.S. craft beer movement started in 1980s, while in Italy it started in the Mid 1990s.

Despite that if we compared the total number of craft breweries in Italy and U.S. (around 500 in Italy and around 2,000 in U.S.) we can easily see that, over the last fifteen years, Italian craft beer industry gained a great success and it could follow U.S. pattern.

5.3 The role of technological development

The first supporters of craft beer movement were home brewers; they used to produce their own beer at home, often in their basement, and used to drink it with relatives and friends. They were able to produce beer thanks to small plants called beer kit, that appeared on the U.S. market around 1980s. These kits represented for beer aficionados the first occasion to produce their own and personalized products. For the first time in the beer industry, technologies became affordable and home brewers started to experiment and give vent to their creativity. Later, some of them became entrepreneurs and converted their ideas and passion into a real economic business.

Most of the interviewed brewers underlined that the initial investment required a big economic effort; the asked for a bank loan not only in the start up phase, but also during the grow phase. During that time, in fact, small breweries started to increase their production volume and it required new investments and plant improvements.

Despite that, over the last decades, the technological development allowed small breweries to obtain the necessary equipment to produce beer.

New technologies that enable small manufacturing firms to produce personalized products and respond quickly to consumers demand could represent the third industrial revolution (The Economist, 2012)⁶¹.

Both in Italy and U.S., the first craft breweries faced many difficulties to obtain machineries adapted to their size. Manufacturing industry was used to work for big companies and all the machineries were designed to support breweries characterized by big production volume.

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⁶¹ www.economist.com/node/21553017

In Italy it was easier to find smaller size technologies than in U.S.; over the last ten years, because of the rapid craft beer industry growth, many small and medium size manufacturing firms (but also artisans in general) that used to work for wine and dairy industry decided to convert their production in order to satisfy specific requests coming from craft breweries. It gave birth to a collaboration between manufacturers and brew master and provided small breweries personalized solution in order to satisfy their own needs. At the same time, manufacturing industry developed new skills and capabilities, and, exploiting their knowhow, established new relationships and acquired new customers.

In U.S., manufacturing industry is not characterized by small and medium size firms and craft brewers found more obstacles in obtaining smaller size machineries. Some of U.S. brewers have been able to take advantage from the network of relationships, earlier developed, and purchased second hand equipment. Others asked for bank loans and decided to buy brand new equipment from manufacturers that used to produce plants for big firms.

Despite that, according to U.S. craft brewers, recently the U.S. manufacturing industry started to realize the growth and importance of craft beer industry and to convert its production in order to provide micro breweries personalized solution.

It is evident that craft beer industry growth represents for both Italian and U.S. manufacturing industry a good occasion to exploit new working collaborations and gain new clients.

Table 5.2: Craft beer movement-innovative aspects

	Equipment	Experience and open source movement	Manufacturing industry's role	Local and global dimension
U.S. craft beer industry	 Spread of beer kits and home brewing phenomenon At the beginning, lack of small firms able to provide personalized plants and machineries The recent development of manufacturing industry provided small breweries new tolls and small size equipment 	 Experience often gained by home brewing experience Recipes are not secrets. Idea of sharing methods and knowledge with other brewers and customers as well (open source) 	 In U.S. plants became a meeting place for local community Often firms are located in the center of the city or in strategic areas Firm as a tool to create community Breweries helps the requalification of the area they are located Creation of small hubs and clusters 	 Raw materials from all over the world E-commerce, websites, social network gave breweries a global dimension Specific raw materials from local areas Close relationships with local stakeholders (networking) Local ingredients to produce beers that represent a specific territory Idea of sharing community values with people
Italian craft beer industry	Small and medium size manufacturing industry converted their production in order to satisfy micro breweries needs Collaboration between manufacturing and craft beer industry	 Home brewing and passion represented the first steps Italian breweries often share tools and experience to external people that want to produce their own beer Sharing of knowledge and recipes (open source) Italian breweries' aim is to produce high quality products Not only production but also design 	Collaboration with manufacturing industry Plants located in industrial areas Italian brewers are mainly concentrated on the production process	 Raw materials from all over the world Brew master creativity and 'Made in Italy' brand to reach foreign market E-commerce, websites, social network gave them a global dimension Specific raw materials from local areas Close relationships with local stakeholder (networking)

Source: author's elaboration

5.4 The regulation of craft beer industry

One of the four hypothesized dynamics that favored craft beer industry growth regards recent changing in laws and regulation.

As already underlined in the case studies analysis, in Italy laws cannot be considered a dynamic that boosted craft breweries development.

According to Italian breweries' owners and brew masters, over the last fifteen years, Italian laws did not significantly changed or favored the opening of new craft breweries. On the contrary, according to them, the long bureaucratic procedures often slowed down breweries activity and discouraged the establishment of relationships with foreign partners or export activities.

Moreover, Italian procedures often differs from the ones implemented in other European Countries and it causes long bureaucratic processes.

In addition, the high excise tax penalizes small breweries, which are characterized by a limited production volume.

U.S. case studies highlighted a different situation.

More specifically, North Carolina craft beer industry experienced a significant growth and development thanks to laws and regulation introduced over the last ten years.

As already emphasized in chapter four, 2005 "Pop the cup campaign" represented a push factor and encouraged the opening of new craft breweries.

Furthermore, changing in self-distribution laws and sales regulation significantly favored craft breweries spread.

It is evident that laws and regulation can play a key role, and the more craft beer industry will gain success, the more Authorities will have to keep into consideration this industry and implement new laws and regulation in order to further boost its development.

Table 5.3: Dynamics allowing the craft breweries establishment-comparison between Italy and U.S. $\,$

	Similarities	Differences
Entrepreneurial motivation and craft beer movement	 Craft beer movement established by not satisfied consumers Main entrepreneurial motivation is passion Home brewing background From passion to a real economic business Possibility of experimenting creative beers 	 In U.S. craft beer movement started at the end of 1970s In Italy craft beer movement started in the Mid 1990s In U.S. craft beer movement is a strong reaction against Multinational Corporation power and a way to spread new lifestyles
Demand and beer industry structure	 At the beginning weak demand Brewers educated both consumers and retailers Beer industry highly concentrated and dominated by few Multinational Corporation Offer and demand pushed each other and grew together 	At the beginning Italian brewers main competitor was wine
Access to assets and equipment	Technological development allowed small breweries to obtain assets and machineries to start up their business Technological development allowed small breweries to obtain assets and machineries to start up their business	U.S. manufacturing industry is characterized by firms that produce plants for big companies Italian manufacturing industry is characterized by small and medium size firms that converted their production in order to meet small breweries needs The Italian manufacturing industry that served wine industry had a key role in providing small breweries personalized machineries
Laws and regulation	Both Italian and U.S. brewers consider the excise tax too high	In North Carolina recent changes in laws and regulation encouraged the establishment of craft breweries In Italy laws did not recently changed Italian bureaucracy discouraged the establishment of relationship with foreign partners

Source: author's elaboration

5.5 Value chain analysis: current situation and main pattern

The value chain analysis underlined both differences and similarities between U.S. and Italian craft breweries.

With regards to raw materials and suppliers, case studies analysis showed that in most cases the relationship that buyers establish with their basic raw materials suppliers (grain, hops, and yeast) is market. Most of the time these raw materials come from foreign Countries, especially Germany, England, and UK; in some cases buyers directly manage relationships with foreign suppliers, while in others they deal with domestic distributors that import raw materials from foreign suppliers. In both cases the relationship between buyer and supplier is market because the switching costs are low for both of them.

The only exception is represented by special raw materials suppliers. Some breweries, in fact, produce special beer using particular raw materials, often coming from the same area where the brewery is located. In this case the relationship between buyer and supplier is relational because of the proximity, because they share common values, because they often developed a personal relationships earlier than a business collaboration, and because raw materials are rare and suppliers cannot be easily replaced.

Production represents one of the main core businesses for all the case studies analyzed and it is the value chain activity craft breweries devote more attention to (figure 5.1 and 5.2).

Since brew masters' aim is producing high quality products, production process is considered by them the most important task and the one that requires the biggest effort. In order to produce craft beers, they follow classic recipes and traditional methods coming from Belgian, German, and England's tradition.

Unlike those Countries, Italy and U.S. lack of a long tradition as beer producers. That gave them the possibility of experimenting and venting their creativity through the production of special beers and the use of unusual raw materials during the production process.

U.S. brew masters makes large use of local raw materials in order to produce beers that represent their territory and create community. The same happened in Italy, where, in some cases, brew masters implement production techniques used during the wine production.

In both Countries, craft beer industry try to emphasize and exploit its resources and its tradition through the production of beer.

Along the value chain, Italian and U.S. breweries manage distribution activity in a different way.

As sowed in figure 5.2, when U.S. breweries started their business, they decided to keep in house distribution both because initial production volume was limited and they could not afford external distributors, and because, at the beginning, they used to distribute their beer to local retailers. Keeping distribution in house gave them the possibility of establishing close relationships with retailers; in the first year, in fact, both Triangle and Craggie's value chain configuration shows that they established relational relationships with their retailers because they did not manage in house the retail activity. They took advantage from that because both retailers and consumers needed to be educated and well informed about craft beer.

Wedge and Fullsteam used to manage in house distribution because they also kept in house retail activity.

Over the last few years, Triangle and Craggie increased their production volume and both retailers number and distance, and they decided to externalize distribution activity. They now manage relationships with external distributors, which in turn manage relationships with retailers, often located far from the breweries or, in some cases, in other states.

The establishment of collaborations with external distribution channels required breweries the development of new skills and capabilities in order to deal and negotiate with new actors along the value chain.

Even if the Fullsteam value chain is almost unvaried, during the interview, the owner stated that he is in contact with external distributors because he planned to reach new markets. Fullsteam already collaborates with one external distributor located in South Carolina (2% of the entire distribution activity) but in 2013 it will probably start collaborate with others distributors because they are the channel to reach retailers located in states or cities far away. The only exception is represented by Wedge. According to the owner, they do not want to increase production volume or reach new markets. Even if demand is high and they are not able to satisfy it completely, they have decided not to grow.

The first year value chain configuration of U.S. breweries is very similar to the current value chain configuration of Italian breweries (figure 5.1). They, in fact, with the exception of Morgana, decided to keep in house distribution activity, and they still keep on doing that.

According to them, external distribution could represents a good occasion because it ensure bigger contracts and higher production volume. At the same time they do not want to lose the relationships network they created with retailers.

With regard to retail activity, both Italian and U.S. brewery made different choices, mainly influenced by distribution management and the relationships they established with retailers.

U.S. breweries that decided to externalize distribution activity have lost control on retailers. In order to advertise their product and develop a network of relationships, at the beginning, they established relational relationships with retailers. They were often located close to the brewery, and it was easier to establish and maintain profitable collaboration with them. Later they decided to enlarge their market and commit retail management to distributors. On the contrary, Wedge, decided to directly manage also retail activity by opening a brew pub next to the brewery. They sell most of their beer inside the brew pub and distribute part of their production to external retailers located in Asheville. They developed relational relationships

with them; they know each other, they established long term relationships based on mutual trust.

Today, Fullsteam represents the step between Wedge and Triangle and Craggie. Fullsteam, in fact, started to manage both distribution and retail activity but nowadays the owners decided to commit part of its production to external distributors in order to reach new markets. The relationships between Fullsteam and new retailers is market, because it is based on price and is directly managed by distributors.

Italian breweries made different choices. BABB, Morgana, and Valscura decided to partially manage retail activity through the opening of restaurants or brew pubs.

All four Italian breweries analyzed sell beer to external retailers and the relationships they established with them is relational, because they still control where and who sell their products. They consider extremely important to control retail activity. That guarantees them to select where positioning their products and monitoring sales activity.

The only exception is Morgana. Among retailers, the ones managed by distributors are characterized by a market relationship between buyers and supplier. Morgana, in fact, has limited contacts with retailers located far away because they are managed by distributors. The only contacts it is still keeping is with retailers located close to the restaurant. In this case relationship is relational.

Value chain analysis emphasizes that both Italian and U.S. breweries which decided to externalize distribution lost control on retailers.

At the beginning both Italian and U.S. distributors decided to manage distribution in house and keep control on retail activity. Over the time, some of them decide to externalize distribution and concentrate on production activity, while some of them decide to keep on managing distribution and retail activity. So far both strategies seem to be good because all breweries analyzed increased both production volume and sales.

It seems evident that, over the next years, distribution activity will gain a strategic role, especially if breweries will decide to reach new markets.

Table 5.4: GVC analysis: comparison between Italian and U.S.

	Similarities	Differences
Raw materials and suppliers	 Basic raw material come from foreign suppliers (market relationship) Special raw material are purchase from domestic and local suppliers (relational relationship) 	U.S. breweries use local ingredients to spread community values Italy is more rich in special and selected special ingredients
Production	 100% managed in house Mix between traditional techniques and creative production process Creative beers that contain special and unusual raw material Italy and U.S. lack of a long tradition as beer producers 	 Production volume and size Italian brewers' aim is to produce high quality products U.S. brewers' aim is to produce high quality products and make people proud about their territory In U.S. creation of clusters (collaboration between breweries and local farmers), while in Italy craft breweries are spread on the entire territory
Distribution	 At the beginning distribution was managed in house The relationships with distributors require big efforts and the development of new capabilities External distributors manage relationships with retailers 	 After they increase their production volume, U.S. breweries externalize distribution Relationship between U.S. breweries and distributors can be considered captive because of the power held by distributors Italian breweries are still managing distribution in house
Retail	 At the beginning retailers were the channel to advertise craft beer (relational relationship) At the beginning local retailers The externalization of distribution activity imply less control on retailers (market relationship) Breweries still keep on advertising their product managing part of retail activity, through brew pubs, restaurants, tours, and events Most of both Italian and U.S. breweries sell on the domestic market 	 Italian breweries still try to manage retailers Italian breweries carefully select retailers because they identify a specific target of consumers U.S. breweries that externalized production lost control on retail activity and the selection process is now a distributors' task U.S. breweries distribute in grocery stores while Italian ones do not

Source: author's elaboration

Figure 5.1: Italian breweries' current value chain configuration

2012	Raw materials	Production	Distribution	Retail
BABB (2006)				
32 (2010)				
Valscura (2007)				
Morgana (2008)				

Figure 5.2: U.S. breweries' value chain evolution

First Year	Raw materials	Production	Distribution	Retail
Wedge (2006)				
Fullsteam (2010)				
Triangle (2007)				
Craggie (2008)				

2012	Raw materials	Production	Distribution	Retail
Wedge				
Fullsteam				
Triangle				
Craggie				

Type of governance:	Market	Relational	Captive	In-house	

CONCLUSIONS

Over the last twenty years, craft beer movement became part of a new cultural and economic trend that characterized many industries. This movement, further fostered by the 2008 economic and financial crisis, rejects consumerism, products homogenization, and products standardization; on the contrary it looks for genuine, personalized, sustainable, and unique products, which are handcrafted.

Craft beer industry has recently became a strong economic business and the success it gained made this emergent field an interesting object of analysis and a real example of new consumers requests and lifestyles.

Within food and beverage industry, craft beer industry has been able to identify the new demand trend and to change beer industry pattern. Since few years ago, both Italian and U.S. beer industry were characterized by a strong concentration. The entire market was held by few Multinational Corporations.

Today, beer industry structure has completely changed. In U.S. more than 2000 craft breweries offer thousands of different beers, while in Italy more than 500 new breweries made available to consumers 2600 type of beers. Offer became extremely differentiated and consumers can try new beers every day.

Furthermore, beers are different from each other, because of the ingredients used during the production process, the methods implemented to produce them, the creativity of brew masters, and the place where they are produced.

Brew masters are the protagonists of craft beer industry renaissance. First of all, they were dissatisfied consumers that decided to produce themselves what market was not able to provide.

They became entrepreneurs because of their passion for beer and their desire of drinking high quality products instead of industrial beers.

Brew masters often transformed their home brewing activity, which became possible thanks to technological development that made available cheap kits and small plants, in a real economic business and created a new entrepreneurial figure. In this phase entrepreneurs were pushed by personal motivations that were stronger than the idea of doing a real economic business Instead of looking for opportunities and conducting market research before opening their business, they just felt the necessity of expressing themselves, their values, and creativity through their own products. Products became the tools brew masters use to tell their story and often the story of their territory.

Craft breweries can be defined human scale businesses, not only because they are small in size, but also because of their human dimension due to the importance of craftsmanship, artisans' values; their personal stories are transferred in their products.

And the human dimension is not only due to the brew master figure, but also to the relationships they establish.

As previously explained, the networking activity and the relationships between brew masters and the others actors along the value chain have been fundamental to start up the business and grow. Small firms are characterized by structural limits, especially due to their small dimension. To overcome these obstacles and take advantage of network opportunities, they developed capabilities in order to use external resources and build relationships.

Case studies analysis underlined the key role played by networks in encouraging the establishment of craft breweries and favoring collaborations between actors sharing the same social context.

They established relationships with people, such as retailers, distributors, and suppliers, in order to share common values in order to further push a new culture and create a new class of consumers. Local values can be shared with the global community thanks to global tools and platforms.

Not only beer industry, but manufacturing industry in general, is living a renaissance.

Consumers started appreciate crafts products made by artisans; their activity is more than a

mere economic business; it became a consumer revolution and a social movement emblem.

It is evident in U.S., where firms became meeting place where share values, experiences, and

create an open source community around the plant and the artisan work.

The role breweries gained in the social environment goes beyond beer production; through the

establishment of plants located in the city center brewers have been able to approach people to

manufacturing industry.

That suggests that firms can be both places where producing, but also places dedicated to

community and people.

APPENDIX

Questionnaire submitted to Italian breweries



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COMPANY DATA

1.	Company's name:
2.	Company's founding year:
3.	How many employees do you have? Total:
4.	Firm's total sales:
	2007:2011:
5.	Sales percentages USA/foreign (2011):
	USA: % Foreign %
	SECTION A
	Start up and Development
6.	How do you explain craft beer phenomenon? Has craft beer movement distinctive features in North East Italy?
<u>ENTI</u> 7.	REPRENEURIAL MOTIVATIONS What were the main motivations leading the start up of your microbrewery?
8.	Did you produce your own beer before opening the brewery? Where did this happen?
<u>EQUI</u>	IPMENT AND TECHNOLOGY How did you access the necessary equipment/technology to start up you new venture?
	Has this implied a significant financial investment?
10.	What has changed over the last 4 years in terms of technological development?
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	Λ	

- 11. To which extent the existence of a potential demand for craft beer encouraged the start up of your business?
- 12. How has this demand change over the last 4 years? Has your consumers target evolved over this time?

ISTITUTIONAL ASPECTS AND REGULATION

13. Has the start up of your business been encouraged by change in the State regulation?

SECTION B: VALUE CHAIN ANALYSYS

14. How would you position your firm in the following chain?



- 15. How many raw material suppliers does the company currently have? Where are these located?
- 16. What kind of relationship has the firm established with them? Do they supply other breweries?
- 17. How does the company access the final market? And how does it manage distributors and retailers?

18. Does the control of retail and distribution represent a potential source of competitive advantage for your organization?

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19.	How many competitors do you have? Where are they located? Has the number of competitors increased over the past 5 years?
20.	Do you compete against multinational companies?
21.	How do you foresee the Italian craft beer industry and your value chain to evolve over the next 5 years?



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COMPANY DATA

1.	Company's name:
2.	Company's founding year:
3.	How many employees do you have? Total:
4.	Firm's total sales:
	2007:2011:
5.	Sales percentages USA/foreign (2011):
	USA: % Foreign %
	SECTION A Start up and Development
6.	Why is NC one of the State with the fastest rate growth of microbreweries in USA? How do you explain this phenomenon?
7. — 8.	What were the main motivations leading the start up of your microbrewery? Did you produce your own beer before opening the brewery? Where did this happen?
·	Dia you produce your own beer before opening the brewery: where did this happen:
<u>EQU</u>	IPMENT AND TECHNOLOGY
9.	How did you access the necessary equipment/technology to start up you new venture? Has this implied a significant financial investment?
10.	What has changed over the last 4 years in terms of technological development?
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DEMA	AND.
11.	To which extent the existence of a potential demand for craft beer encouraged the start up of your business?
12.	How has this demand change over the last 4 years? Has your consumers target evolved over this time?
ISTIT	TUTIONAL ASPECTS AND REGULATION
13.	Has the start up of your business been encouraged by change in the State regulation?
	SECTION B: VALUE CHAIN ANALYSYS
14.	How would you position your firm in the following chain?
	Raw Material Production Distribution Retail
15.	How many raw material suppliers does the company currently have? Where are these located?
16.	What kind of relationship has the firm established with them? Do they supply other breweries?
17.	How does the company access the final market? And how does it manage distributors and retailers?
18.	Does the control of retail and distribution represent a potential source of competitiv advantage for your organization?

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19.	How many competitors do you have? Where are they located? Has the number of competitors increased over the past 5 years?
20.	Do you compete against multinational companies?
21.	How do you foresee the NC craft beer industry and your value chain to evolve over the nex 5 years?

List of people interviewed

Organization	Interviewee	Role	Location	Date	Length
Acelum	Enrico Scagnoli	Brew master	Castelcucco (TV)	July, 6th	1 hr.
32 via dei birrai	Fabiano Toffoli	Co-owner	Pederobba (TV)	July, 6th	1 hr.
32 via dei birrai	Fabiano Toffoli and Loreno Michielin	Co-owners	Pederobba (TV)	December, 19th	1 hr. 15 mins.
BABB	Luigi and Francesco	Co-owner and brew master	Manerbio (BS)	August, 1th	1hr. 45 mins.
BABB	Luigi and Francesco	Co-owner and brew master	Manerbio (BS)	December, 21st	45 mins.
Morgana	Andrea Zanatta	Co-owner	Morgano (TV)	September, 5th	1 hr.
Morgana	Andrea Zanatta	Co-owner	Morgano (TV)	December, 20th	1 hr.
Triangle Brewing CO	Rick Tuft and Andy Miller	Owners	Durham (NC)	October, 2nd	50 mins.
Triangle Brewing CO	Rick Tuft	Owner	Durham (NC)	December, 1st	30 mins.
Fullsteam	Sean Lilly Wilson	Owner	Durham (NC)	October, 3rd	1hr. 15 mins.
Fullsteam	Sean Lilly Wilson	Owner	Durham (NC)	December, 10th	30 mins.
Bull City Burger and Brewery	Seth Gross	Owner	Durham (NC)	October, 4th	45 mins.
Wedge Brewing CO	Tim Schaller	Owner	Asheville (NC)	October, 23rd	1 hr.
Craggie Brewing CO	Bill Drew	Major shareholder	Asheville (NC)	October, 23rd	1hr. 15 mins.
Oyster House Brewing	Billy Klingel	Owner	Asheville (NC)	October, 24th	50 mins.
Valscura	Gabriele Mazzer	Owner	Sarone di Caneva (PN)	December, 20th	1 hr.

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