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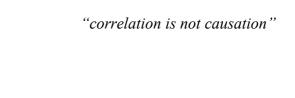
Department of Economics and Management

Master Program in Business Administration

ORGANIZATIONAL RESILIENCE
AN ANALYSIS OF THE QUASI-MEDIUM-SIZED ITALIAN FIRMS

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"correlation is not causation"

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INTRODUCTION & SUMMARY

RESEARCH QUESTIONS OF MY DISSERTATION. This dissertation aims to answer the following research questions: «Does the ownership structure affect the chance to survive the economic crisis?» and «Does the level of capitalization affect the chance to survive the economic crisis?».

WHY THIS QUESTIONS MATTER. In this dissertation we want to analyze the impact that proprietary concentration has on the companies in periods of strong turbulence. We also want to investigate what role the Equity plays within companies, and whether an increase in capitalization can be studied as a driver of resilience. Investigating these two topics is crucial because both are, although in different ways, two fundamental characteristics of the Italian manufacturing system.

CHAPTER 1. The chapter first illustrates the general concept of resilience and how it is studied and applied by multiple research areas. In fact, since the first publication of Holling in 1973 on the ecological resilience, many researchers have expanded the concept by applying it to different fields of research. Considering the external environment in which the organizations live and carry forward their objectives, we proceeded to study the resilience from an organizational point of view. Although organizational resilience is a relatively new concept, numerous studies have also been carried out in this stream. It is provided a conceptualization based on three levels of the literature and are discussed the most important elements. Among these we focused on the capabilities that organizations must develop and on the steps to be followed to be resilient. It so understood that resilience is not a stable concept or a goal to be achieved and then stabilized. Resilience

is rather a dynamic ability, which concerns all areas of an organization and on which the human aspect plays a fundamental role. In the last paragraph are discussed the tools concerning the measurement of resilience. Many of them are based on surveys and on the relative elaboration of the results both from a qualitative and sometimes quantitative point of view. Few but important studies are quantitative ones based on organizational performance ratios.

CHAPTER 2. The second chapter starts with a question: "What leads an organization to be resilient?". Although it is a very common question in the studies on organizational resilience and although it may seem easy to answer, the academy and the business environment have merely provided us with a very fragmented picture. There are many cases of companies that have become resilient by relying on some features of the organization, and that are not imitable. Through a literature review it is possible to identify multiple drivers on which organizations can leverage to be resilient. In particular, five major drivers have been identified: Authenticity, Customer-centricity, Business diversification, Long-term orientation and Decision-making process. For each driver a short case study has also been carried out. Leveraging one or all of these drivers may not be enough to be resilient. In fact, every company has its own uniqueness and management must focus on the core competencies of its organization. For instance, this is particularly true when it comes to Business diversification or to the Authenticity. A good diversification of the products must start from an analysis of what the skills that the company can make available are. Also, with regard to geographical diversification, the organization, in order to be resilient and perform better, must strive to find its specific entity within the international contexts that are most consistent with the own and unique characteristics of the company. Authenticity has been rediscovered thanks to an inverse effect of globalization, which, on the one hand, has opened up the frontiers of commerce and culture, but on the other hand, has led to regain interest in authenticity. Finally, it has been demonstrated that some drivers related to corporate governance can influence the ability of organizations to respond positively to the turbulence of the outside world. Among these, it has been decided to place greater emphasis on decision-making processes and on long-term play.

CHAPTER 3. In this chapter we make a trip into Made in Italy and we highlight to which extent it is the backbone of the Italian manufacturing system. First, we analyze the brand Made in Italy and its characteristics, and the four categories that belong to it: Fashion & Apparel, Automation & Mechanics, Furniture & Home Appliances and Food & Beverages. The Made in Italy has almost taken Italy by its hand in order to lead it out of the crisis, continuing to hire talents and to sustain sales even when all the other sectors were falling. Quality, innovation and authenticity are some of the inimitable features of Made in Italy. The brand continues to be recognized worldwide and translates its uniqueness into an increase in exports and an active trade balance with foreign countries. We also analyze how many companies prefer to remain small because this allows them to have better results. Despite this, companies that are able to leverage some factors in order to grow are able to become hares and run towards greater prosperity. We develop the second part of the chapter considering the connotation of the term "hares". In fact, starting from the study of Gubitta, Tognazzo and Favaron (2013) we proceed to carry out a longitudinal analysis on a sample of 1554 quasi-medium-sized companies. It is therefore possible to see how the Made in Italy companies have been resilient. Indeed, 76% of the companies present in 2007 are still active in the market and only 7.7 went bankrupt. From the initial sample, 30% of them have been able to overcome the 2007 economic and financial crisis and go beyond the quasi-medium threshold. Some data regarding the legal status, the geographical area, the sector of belonging and the turnover will be analyzed in detail. By relating the data to each other it is possible to have a representative picture of Italian Made in Italy.

CHAPTER 4. In this chapter we try to combine the previously carried out studies and understand which drivers have allowed our sample companies to survive and to have greater performance. We have therefore carried out two regression models in order to discover if our initial hypothesizes were significant. What emerged from the analysis led us to formulate considerations that are anything but obvious. Although one of our hypothesis, based on the greater ability to react to the crisis by organizations that had a greater concentration of ownership, the empirical analysis has defeated this assumption. Indeed, it has emerged that higher degree of proprietary concentration does not affect the probability of surviving the crisis. Furthermore, even the hypothesis that higher concentration could be a driver for greater performance was rejected by regression

models. These results can be traced back to various reasons, among which the lack of a market for corporate control has been emphasized. Then the second hypothesis was studied, and the regression on equity revealed significant data. In fact, a high level of capitalization increases the chances of surviving the crisis. The considerations that have emerged can be many. The ownership that believes in the entrepreneurial project and engages both emotionally and economically has positive implications on the long term and is more capable of resisting the turbulence. Our analysis and our considerations are also in line with the change in trend of Italian companies that are becoming less and less bank-dependent.

ORGANIZATIONAL RESILIENCE: LITERATURE REVIEW

1.1 Introduction

Nowadays, despite our world is more and more technologically advanced and interdependent, where skills and knowledge are shared, not all disasters and shocks can be prevented. Some political events such as the election of Trump as president of the USA, or the embargo against Russia in 2014, or natural disasters such as hurricanes in the Atlantic Ocean in 2017, Earthquake and Tsunami in Japan in 2011 and Hurricane Katrina in 2005, or the 2007 economic and financial crisis and the 2012 credit crunch phenomenon, have important repercussions on people, communities, institutions and organizations (Kitching et al., 2009; Kutlina-Dimitrova, 2017; Wagner et al., 2017; Toya & Skidmore, 2007)

To overcome these situations, the *resilience* has played an increasingly important role over the years, becoming a topic of study for researchers in different research fields.

As suggested by Ruiz-Martin et al. (2018), the growing interest in resilience is due to people's attention to the consequences of natural disasters and the speed with which changes push individuals and organizations toward periods of instability, and being resilient became a key to survive and to achieve success in the changing environment.

A search on Google Scholars with the query "resilience" leads to more than 1.1 million results if we take into consideration the period from 1973, the year of the first publication regarding the resilience by Holling, and 2018. In the same way, a similar research carried out on Scopus leads to more than 16,500 results in the field of Social Sciences. To confirm the growing interest in resilience reference can be also made to the trends in Google Trend research in Social Sciences' category. As Figure 1 shows, there has been a gradual and

constant increase interest on resilience, with peaks during shocks that have occurred over time.

Figure 1: Interest over time of the term "resilience"

Source: Google Trends, retrieved from www.trends.google.com

Even some governments have begun to move their policies to include resilience on their agenda. For example, in 2010, the US Department of Homeland Security published a political and theoretical framework with which it aims to increase the knowledge and the applicability of some features in infrastructures to achieve specific resilience goals. Also, the European Commission published the Action Plan for Resilience in Crisis Prone Countries (2013) with the "aim to establish a systematic and holistic approach to building resilience in crisis and risk-prone contexts" (p.2).

According to Pirotti and Venzin (2014) the term resilience has its roots in the Latin "resalio", which it means "bounce". The term was first adopted in mechanical physics to measure the impact resistance of a material and its ability to resume the original shape.

It is generally accepted that the first work on resilience was carried out by Holling in 1973 in the field of ecology titled *"Resilience and Stability of Ecological Systems"*. In his popular work, Holling (1973) referred to resilience as the ability of an ecosystem to respond to disturbances and return to an equilibrium through damage resistance and rapid recovery.

According to Bhamra et al. (2011) and Williams et al. (2017), the broad meaning of the term has led the word resilience to be subject to different interpretations that have suggested studies in a variety of research fields ranging from ecology to engineering and more recently resilience engineering, from psychology to disaster management and across multi-level analysis (individual and system-organization).

Although the concept of resilience has changed considerably over the years and the research fields, all the definitions share the same core perspective: resilience represents

the ability of a system, rather than an individual, to react to external changes, in order to be able to find a new equilibrium point.

Given the heterogeneity of the research fields interested in resilience, one can think that there is no link between the different disciplines. However, Ruiz-Martin et al. (2018) show how multiple connections between the different fields exist, explaining for example how individual and organizational resilience are closely related to each other, and how resilient organizations contributes to create strong community (Powley, 2009).

This chapter will focus on organizational resilience. First, it will provide a short introduction regarding the surrounding environment and the causes that lead an organization to period of instability. Then, it is proposed a framework of the definitions and related approach to the organizational resilience. The paragraph focused also on the capabilities that organizations should enhance to become resilient. Subsequently, in Paragraph 1.3 we asked ourselves how can organization be resilient e so we debated the four major pillars that lead an organization to survive. In paragraph 1.4 the methods concerning the measurement of resilience will be discussed. Finally, some concepts related to resilience will be clarified considering the distinction between fragile, robust and "antifragile".

1.2 Organizational Resilience

The increasingly frequent changes in the surrounding environment undergo organizations to stressful situations that may lead to temporary imbalance. To the sudden external shocks (Bhamra et al, 2011) it is also added that the organizations are more and more interconnected with each other and with the outside world (Lee et al., 2013), causing what some authors called *"butterfly-effect"* (Annarelli and Nonnino, 2016). Therefore, it is essential for an organization not only to prepare and defend itself against shocks by acting and improving itself. On the contrary, it is necessary to build resilience also outside of its structure, expanding the resilience also to the network with which the organization interfaces (Boin and Eeten, 2013).

A good example of the uncertainty surrounding the environment is the one suggested by Sull (2009), who compared the uncertainty of economic competition to that of a boxing match. Although the two boxers can study the moves used by their opponents in previous matches, they will never be able to predict exactly how the match will go. This is because the study and preparation while being essential, do not allow to predict exactly how the

opponent will decide to manage the meeting, so the resistance and readiness to respond to unexpected attacks is one of the fundamental drivers that would lead the athlete to win. In the same way, it is essential for an organization to study and prepare for possible turbulence, but it is equally essential to resist and be able to manage promptly the changes in the external world.

Analysing the causes that lead organizations to periods of instability needs further investigation. If on the one hand events can take on the connotations of "unpredictability" (i.e. natural disasters, human errors, political crises and economic recessions), on the other hand, shocks can take the form of continuous and repeated events (i.e. disruptive innovation, customers' behaviours, competitors) that change the dynamics in which the organization is used to carry out its activities. Indeed, according to Gilly et al. (2014), the impact and the reaction of these two different types of events is not naturally the same. In the first case the company reacts towards the events when they are triggered trying to limit the threat. Instead, in the second case the organization can anticipate the disruption in order to integrate/adapt itself to the changes. According to Sawik (2013, as cited in Annarelli and Nonnino, 2016) and Tognazzo et al. (2016), this allows us to introduce the concept that resilience at organizational level can no longer be associated exclusively with constructing reactive measures activated when the event occurs. Rather it must be a daily planning activity that leads to what Annarelli and Nonnino (2016) defined *"Resilience thinking"*.

In this context, being resilient is a competitive advantage over competitors because it provides important information on the weaknesses and strengths of the organization. The study of some indicators related to resilience (Lee et., 2013) allows to better understand the organizational structure and to recognize when a risk situation is approaching.

1.2.1 How is organizational resilience conceptualized?

Organizational resilience is a relatively emerging field of research if it is compared to other disciplines. Although there are several reviews in this stream, the research is still fragmented (Ruiz-Martin et al., 2018). However, it is possible to define organizational resilience as the ability of a system to remain in balance despite the fluctuation of the surrounding environment.

The literature review shows how organizational resilience can be study under different perspective. In this paper the organizational resilience is split down in three streams of

research: the first one refers to the resilience as a characteristic or set of characteristics. The second stream refers whereas resilience should be thought as in negative (bounce back) or positive terms (grow with challenge). The third perspective is focus on psychological and behavioral approach. It needs to take into account that the three approach are not in contrast and some definitions share proprieties of one, two or more streams.

Resilience as a feature

According to Ruiz-Martin et al. (2018) there are many open issues regarding the conceptualization of resilience. One of the issues regards the terms used by the scholars to define the resilience. In this field, resilience is a characteristic that the organization develop over the time. This characteristic or set of characteristics allow the organization to resist, adapt, win, change and growth when the disruption events occurred. For instance, some authors referred to it using the term *"capability"* (among others Annarelli and Tonnino, 2016; Carvalho, 2012; Erol et al., 2009; Välikangas, 2010), others *"ability"* (among others Gilbert et al., 2012; Pirotti and Venzin, 204; Rose, 2007; Sheffi, 2005, as cited in Hosseini et al, 2016; Vogus and Sutcliffe, 2003) or *"capacity"* (among others Coutu, 2002; Lengnick-Hall and Beck, 2003: Powley 2009; Tognazzo et al., 2016). The authors however do not say too much regarding the choice to use those different terms and in a variety of papers they are used as synonymous to refer as the power of an organization to face disruption events.

Other researchers (McManus et al., 2008; Erol et al., 2009) go further in their papers and identified the features that organizations should enhance to be resilience. For instance, McManus et al. (2008) speak about adaptive capacity, situation awareness, and management of keystone vulnerabilities. Some of these characteristics are also used by the British Standard Institution (BSI) (2014) as steps that organizations should follow to build resilience. Furthermore, Erol et al. (2009) develop a framework of characteristics such as flexibility, adaptability, agility and efficiency that improve the organizations' capacity to be more responsive with the surrounding environment.

Resilience as outcomes

Whereas resilience is thought as a "pattern" of characteristics (Lengnick-Hall and Beck, 2003, p. 2, as cited in Somers, 2009) or rather a set of steps, through a review of the

literature emerges how resilience can be seen also as an outcome. In this case, for some authors the resilience is not merely the ability of an organization to "bounce back" after disruption or to "absorb" stress. Instead scholars in this stream give a positive meaning of the term, defining resilience as the ability to cope with disruption and become better ("bounce forward").

For instance, a resilience is defined as the ability to "keep or recover a steady state" (Sheffi, 2005, as cited in Hosseini et al., 2016), or the capability to return to its original state, or to a new, more desirable one (Carvalho, 2012). Similarly, Rose (2007) adopts the term "static resilience" to describe the ability of a system or organization to maintain its most important functions when a shock occurred. Rose (2007) also adds the component of "dynamism", referred to the speed at which an organization returns to an ideal state.

Other authors, instead, perceive resilience as the ability of an organization to grow with challenges and adapt the organization to changes in the surrounding environment (Gilbert et al., 2012). From this perspective, resilience is not only the ability to absorb stress, but also identifying possible threats and reacting reactively in order to improve the existing situation (Longstaff, 2005). In their works, Vogus and Sutcliffe (2007) define the resilience as the ability to absorb the stress, learn from the adversity and be more competitive than before. Similarly, Tognazzo et al. (2016) refer to "an organization's capacity to adjust to challenging conditions like environmental shocks and emerge from them strengthened and more resourceful" (p. 5).

Pirotti and Venzin (2014), in proposing their evaluation model of resilience, affirm that two conditions must be verified: the organization must be exposed to an external event, and the organization must have above average performance before, during and after the crisis. So as the scholars affirm, resilience is the ability to resist and react to shocks.

Lastly, Välikangas (2010) defines resilience as the courage to see opportunities instead of threats, and to take advantage of them.

Resilience as human resources strategy

The research on the organizational resilience has also fallen into other areas, highlighting how the resilience does not depend only on some structural characteristics of the company. Indeed, it can be also guided by the behavior of people who are part of the organization. This stream of thought defines resilience according to a psychological and behavioral approach.

Some studies show how organizational resilience falls on the strength of employees (Ma et al., 2018), or on the individual resilience of people forming an organization (Riolli and Savicki, 2003). With regard to the individual resilience of employees, some authors have indicated how to build an individual resilience is necessary for an organization to respond promptly to threatens (Mallak, 1998a). Home and Orr (1997) demonstrates how leaving employee to medium-long stress periods, lead them to behave in ways that would damage the organization. In fact, according to Williams et al. (2017), in planning the recovery from a stressful situation and in taking actions to face the changes, organizations tend to underestimate the importance of human resources. Underrate the role of people lead the organization to lose an important part of the ability to solve particular moments of difficulty, increases the risk that the crisis may last longer and may be even heavier. This approach has also been enveloped by the Powley' study (2009). The author (Powley, 2009) analyzed the answers given by students and staff of a university community and showed that there is a strong positive correlation between the ability of an individual to be resilient and the group capability to be strong and react reactively to stress. Furthermore, Powley (2009) has highlighted how an open, dynamic and supportive workplace is essential to tie employees to each other and feel part of an organization.

From a strategic point of view, Koronis and Ponis (2018) highlight how enhancing employee resilience is an organization's ability that help to overcome competition and introduce innovation.

In this work, we will consider the definition proposed by Annarelli and Tonnino (2016).

> «Organizational resilience is the organization's capability to face disruptions and unexpected events in advance thanks to the strategic awareness and a linked operational management of internal and external shocks. The resilience is static, when founded on preparedness and preventive measures to minimize threats probability and to reduce any impact that may occur, and dynamic, when founded on the ability of managing disruptions and unexpected events to shorten unfavorable aftermaths and maximize the organization's speed of recovery to the original or to a new more desirable state.»

The decision to adopt this definition falls on the fact that it takes into account the three major conceptual streams described above, and introduces some components and drivers that will be further explored.

Based on the above definitions, Figure 1 represents a combination of the approaches just mentioned and the related reference literature.

Table 1: Conceptual Framework Organizational Resilience

Resilience as features	Resilience as outcomes	Resilience as HR strategy
Ability (among others Gilbert et al., 2012; Pirotto and Venzin, 2014; Rose, 2007; Sheffi, 2005; Vogus and Sutcliffe, 2003); Capability (among others Annarelli and Tonnino, 2016; Carvalho, 2012; Erol et al., 2009); Capacity (among others Coutu, 2002; Lengnick-Hall and Beck, 2003: Powley 2009; Tognazzo et al., 2016)	"Bounce back" approach: • Capability to return to its original state, or to a new, more desirable one (Carvalho, 2012) • "Keep or recover a steady state" (Sheffi, 2005) Ability to maintain the most important functions (Rose, 2007) "Bounce forward" approach: • Grow with challenges and adapt the organization to changes (Gilbert et al., 2012) • Improve the existing situation (Longstaff, 2005) Absord stress, learn and be more competitive (Vogus and Sutcliffe, 2007)	Strenghts of employees (Ma et al., 2018) Individual resilience builds organizational resilience (Riolli and Savicki, 2003) Ability of people to absorb crises Loyalty and supportive workplace (Powley, 2009) Individual resilience is necessary to respond promptly to threatens (Mallak, 1998a) Employee resilience help to introduce innovation and overcome competition (Koronis and Ponis, 2018)

Source: Author's elaboration

1.2.2 Organizational resilience and its components

The conceptual definitions in 1.2.1 provided a framework of the meaning of organizational resilience, but nothing says about what composed resilience. In order to provide a more clearly meaning of organizational resilience, a framework of organization's endowments is provided.

According to Williams et al. (2017), endowments are all the capabilities, knowledge, abilities, skills and processes that organization need to consider, develop and constantly improve in order to have a preparedness, responsiveness and robustness organization.

Based on the framework provided by Lengnick-Hall and Beck (2005), and integrated with other seminal works (among others Gittel et al., 2006; Williams et al., 2016) four resilience capabilities are likely to have a positive influence on the ability of organizations to success over changes.

Financial capability

One of the aspects that might influence the ability of organizations to overcome challenges period is the opportunity of them to use slack resources.

According to Tognazzo et al. (2016) and taking Resource-Based View (RBV) as a starting point for the analysis regarding the slack resources, many authors highlight how the Valuable – Rare - Inimitable - Non-Substitutable (VRIN) resources can determine the success of organizations over challenge periods and gain competitive advantage over their competitors.

Although financial resources do not belong to the category of VRIN resources because missed some of the attributes (i.e. rarity), they are essential (Ireland et al., 2003). Prior researches have emphasized the importance of financial slack resources due to their ability to be readily transferred and used during challenges periods (Tognazzo et al., 2016). Furthermore, Kraatz and Zajac (2001) suggest financial slack resources provide a sense of certainty about the future. In their study about the US airlines companies that survive after the terrorist attack of 9/11, Gittel et al., (2006) found that the organizations that were better able to absorb the shock and performed efficiently their activities were those with the highest slack financial resources.

Cognitive Capability

Cognitive capacity is a conceptual orientation (such as vision, sense of purpose, strong value, knowledge, expertise) that enables organization to enhance its capacity to overcome shocks (Lengnick-Hall and Beck, 2011). Having these cognitive endowments improve the sense of belonging to a community and encourage individuals to work better and to rapidly notice when disruption events are potentially occurring (Williams et al., 2016). Organizations with cognitive resilience are more incline to develop a pleasant workplace where ingenuity, creativity and flexibility are encouraged rather than dissuaded (Lengnick-Hall and Beck, 2005). Organizations with cognitive capacity are also those that well-welcomed innovation and new opportunities.

According to Lengnick-Hall and Beck (2005), organizations that want to take advantage over peers by enabling cognitive capability endowments need to both improve communication between individuals and build strong identity.

Behavioural Capability

Improve the capacity of constantly learning from the surrounding environment and of sharing information and the best practices within a system is the engine that lead organizations to move forward from a crisis situation (Lengnick-Hall and Beck, 2005). Despite the behavioural capability can lead to think that only individuals are involved, the research of Lai et al. (2016) has shown that also structural aspects (such as size, human resources management, routines and centralization decision-making processes) influenced the ability of firm to overcome economic downturn.

In addition, organizations with strong behavioural capability help to broaden the repertories of action that organizations can put into practice and tackle "unexpected" dangers even if they are not "familiar" (Lengnick-Hall and Beck, 2005).

Contextual Capability

Contextual capability is the most important but also the most difficult to achieve for organizations. It integrates the capacity of organization to gain resources (financial capability), to encourage ingenuity, creativity and flexibility in the thinking process (cognitive capability) and to enhance sharing information and best practices within organizations (behavioural capability). In addition, contextual capability is composed of social capital and broad resources network (Lengnick-Hall and Beck, 2005). Furthermore, Lengnick-Hall and Beck (2011) identifies two other factors such as psychological safety and diffused power and accountability that rely all together lead organizations to react quickly to environmental changes.

The first factor that influenced contextual capability is the psychological safety. Organizations that are able to establish a strong sense of community are perceived to be friendlier by their employees (Edmondson, 1999). Develop a serene work environment helps individuals to be less afraid about the risk of being seen as incompetent by asking help or information. Further, it pushes employees to be sincerer by giving feedback and sharing mistakes.

As organizations are constantly influenced by the external environment, developing strong connections with people and organizations plays a fundamental role in the survival and success of the organization. This is especially true if relationships are sincere and based on mutual respect (Ireland et al., 2002). Benefits from interaction with others includes the opportunity to access more information and extends knowledge and

resources as groups recognize their interdependence (Lengnick-Hall and Beck, 2011). Where strong trust-based communities could be created, it was also possible to see how they evolved into strong long-term partnerships (Lengnick-Hall and Beck, 2011) that allowed organizations to be stronger and more competitive while being respectful of partner organizations.

The third factor that helps to create resilient organizations is how the organizational structure is designed. According to Lengnick-Hall and Beck (2011), it is widely accepted that organizations with less flexible hierarchical structures are also the least resilient. This is due to the fact that both the response times of the processes are slower and because a too high-level management does not involve the people in the organization. A resilient organization must therefore adopt a "holographic" structure (Morgan 1997, as cited in Lengnick-Hall and Beck, 2011) that allows the organization to be flexible and able to learn and adapt with respect to changes.

Talking about broad resource network means taking into consideration both the material resources and the intangible ones (Lengnick-Hall and Beck, 2005). Some studies have shown that resilient people are those who are able to build and strengthen collaborative relationships more than others. Powley (2009) has also shown that building relationships of trust between the same community itself helps the group and individuals to get out of trouble more quickly and respond to critical issues with greater success. Similarly, it is possible to create a parallel with the organizations. In addition, build solidarity networks along the supply channels and even with peers play an important role within the context in which they operate (Lengnick-Hall and Beck, 2005).

1.3   Preparing for resilience: the 4 phases

One of the most recurring questions about resilience is how an organization can survive to a shock. In other words, how can an organization be prepared to be resilient? What has been said in the previous paragraphs gives us a theoretical and conceptual framework regarding resilience and which parts make it up. But organizations are not born resilient, but they become it by developing some capabilities (such as financial, emotional, cognitive and contextual) and by preparing itself to exploit withstand to unexpected events. Even in this case the literature does not provide a shared and unanimous framework about which characteristics lead an organization to respond positively to a

shock. However according to Koronis and Ponis (2018) and Hollnagel et al. (2008, as cited in Lee et al., 2013), it is possible to identify four preparing phases:

- Preparedness
- Responsiveness
- Adaptability
- Learning Process

Preparedness

Most of the scholars still endorse the theory the higher the quantity of planning, studying and training an organization provides for, the higher its chances of surviving an adverse event (Pearson, 1998). Being prepared means that every member of the organization knows what to expect and how to behave in case of crisis. This is done through the processes of risk assessment and potential impact analysis, and then by modelling a set of possible solutions to be applied when the emergency actually happens (Koronis and Ponis, 2018). This is strictly correlated with the capacity of organizations to develop cognitive and behavioural capability. Open-minded and flexible structure lead individual's creativity free to re-design the organization and enhance responsiveness Lengnick-Hall and Beck (2011).

Responsiveness

One of the most important factors influencing resilience is the capability of an organization of reacting to a shock: any preparatory measure will have little or no effects at all if the entity is not able of responding on time, efficiently, and in an innovative way (Crandall et., 2010, as cited in Koronis and Ponis, 2018). Responsiveness involves understanding what happens, contextualize situations, foresee the outcome, and staying on focus even under the psychological pressure, due mainly to the immediacy of the event (Koronis and Ponis, 2018). What happened with Walmart during Hurricane Katrina is a perfect example of how, even without an adequate preparation, an organization may face troubles and impromptu decisions in an effective manner (Koronis and Ponis, 2018).

Adaptability

Resilience does not necessary mean going back to the status quo, thus restoring the situation precedent to the crisis, but it may also be interpreted as the ability of adapting

to changes, being flexible, and reacting to the unforeseeable exploiting its positive effects (Sutcliffe and Vogus, 2003). The case of Toyota in 2011 is an example: despite the severe impact on the production, due to the East Japan Earthquake, they succeeded in relocating their whole supply chain resources within a short time period, thus adapting to the new conditions, and recovering quite quickly (Koronis and Ponis, 2018).

Those organizations which are open to changes can absorb positive inputs from the adverse challenge, leading to creative thinking and solutions that will result in an eventual structural improvement (Lengnick-Hall and Beck, 2011). This is essential for the sake of resilience: if people are not encouraged to deal with new challenges, they will always try to solve problems in an old-fashioned way, with solutions from the past that will probably not work (Lengnick-Hall and Beck, 2005). If instead the company reacts by transformation and adaption it will be able to get back on track, but a new and faster one.

Learning process

Organizational learning is often seen as a side concept, but resilience demand that learning systems are developed and well-structured so to be able of capturing messages from the outside environment and become an open system (Koronis and Ponis, 2018). Furthermore, it is essential that the entity is able of understanding past mistakes in crisis management, and projecting them onto the current situation so to come up with a new and more effective performance (Lengnick-Hall and Beck, 2005; Koronis and Ponis, 2018).

1.4   Organizational resilience's assessment tools

Along with the discussion concerning how to conceptualize resilience, it has long been debated how to *measure resilience* within the organization.

If the resilience of individuals and materials is more easily measurable, thanks also to objective tools, the organizational resilience is more complex to evaluate. Finding the tools through which resilience can be assessed allow organizations to understand more precisely which aspects require more attention and resources. Monitoring and measuring the ability of an organization or an individual to be resilient is useful because it allows early detection of stressful situations that, if not identified or underestimated, lead to more serious disruptions.

Before going into details about the measurement of performance, it is right to make some premises. First, if the goal is to increase resilience, defined as the ability to resist and react to turbulence, it is necessary to identify the instrument that can best measure it. The studies conducted in this field do not provide a univocal and easy to use framework, so the choice of the tools and the evaluation methods assume a fundamental role for the success of what an organization assumes regarding resilience. Second, according to Pirotti and Venzin (2014) resilience does not occur if there are no external shocks. Third, starting from the assumption previously analysed that resilience is a dynamic process and not a static objective, the study of an organization's ability to survive shocks must be studied over a long-term dimension (Pirotti and Venzin, 2014).

As for the conceptual aspect of the organizational resilience, even in the way of measuring it the scholars did not find a shared framework. Through the study of the literature and taking into consideration the seminal work of Ma et al., (2018) and Ruiz-Martin et al., (2018), we will analyse the different methods of measuring resilience. The assessment tools are classified in the same three conceptual streams discussed in section 1.2.1.:

- Assessment based on resilience features;
- Assessment based on resilience outcomes;
- Assessment based on social ties.

Assessment based on resilience features

Where organizational resilience is considered as a set of characteristics (or features), its measurement is also based on a series of attributes (Ma et al., 2018). For example, McManus et al. (2007) identify three key factors of resilience: situation awareness, management of keystone vulnerabilities, and adaptive capacity. Based on these characteristics, they built an evaluation system consisting of 15 indicators (5 for each factors). Seville (2009) has tested the previously described evaluation model and added a fourth factor: organizational ethos. The study involved 200 organizations in Auckland, New Zealand and provided a self-assessment questionnaire asking for a score of 1-10 for each question. In his qualitative study on organizational resilience in New Zealand, McManus (2008) introduces a model of resilience (ROR - Relative Overall Resilience) composed of three factors (situation awareness, management of keystone vulnerabilities, and adaptive capacity) and evaluated by 15 indicators. Taking as a starting point the ROR

model, Lee et al. (2013) did not find support of the McManus' model (2008) and proposed a new adjusted version composed of 4 factors and 73 items. However, even this version has not found support with the data of their research, concluding that a new evaluation model is necessary. Therefore, Lee and colleagues (2013) have suggested a model with two factors, adaptive capacity and planning, and 13 indicators to measure it.

However, other scholars have proposed different factors to measure resilience. Some of them, including Kohno et al. (2012, as cited in Ruiz-Martin, 2018) take into consideration alternative characteristics such as the geographical location of the organization, the infrastructures close to the organization and the supply channels.

Starr et al. (2003) instead suggests the measurement of resilience basing it on 8 questions. Mallak (1998b) evaluated the organizational resilience in the health care sector. He developed a resilience scale measurement based on six dimensions such as and goal-directed solution seeking, avoidance, critical understanding, role dependence, source reliance and resource access. Subsequent studies have shown that the Mallak' six indicators are valid and reliable (Ma et al., 2018). Recently, Somers (2009) referred to the proposal of Mallak (1998b) and organized the six indicators in four different levels (ORPS, Organizational Resilience Potential Scale) by assigning an evaluation scale from 1 to 7. Finally, Hollnagel (2010) proposes evaluating resilience based on an organization's ability to develop skills such as readiness to respond to threats, monitor processes, anticipate and learn. He also stated that it is not possible assess resilience through a single measurement. Indeed, Hollnagel (2010) proposed the Resilience Analysis Grid (RAG) that includes four sets of questions related to the organization's abilities.

Assessment based on resilience outcomes

Evaluating resilience based on outcomes that the process of resistance to events can give means taking into consideration some quantitative aspects. These differ from measures based on attributes because the latter are based on qualitative aspects. As suggested by some studies (among others Lee et al., 2013) assessing organizational resilience through qualitative indicators may encounter some difficulties. In fact, many measurement tools used are based on information given by a single member of the organization, often with high degree of specialization in the area in which he/she works. This produces an evaluation based on a single experience, and probably with the interest of achieving a high score (Lee et al., 2013).

Studies on the assessment of organizational resilience based on outcomes can be divided into two main methods. The first is based on the study of balance sheet data and their variations, while the second is based on the organization's business objectives.

Some seminal works like those of Watanabe et al. (2004), belong to the first group. In their study on the high-technology firms, the authors used the Operating Income to Sales. Similarly, Markaman and Venzin (2014) propose to use Return on Equity (ROE) because it seemed to be more reliable indicator for the long-term performance. Pirotti & Venzin (2014) propose a measure of the resilience called VOLARE. Starting from the ROE as a performance indicator, the authors develop their model by taking the average ROE over a period of 10 years, and the volatility of the same indicator as a measure of risk.

Dalziell and McManus (2004) instead affirm that the measurement of resilience can be studied also through the Key Performance Index (KPIs) and then evaluate how efficiently an organization is able to reach the set objectives.

Assessment based on social ties

As stated in paragraph 1.2.1., resilience is also conceptualized following a psychological and behavioural approach. It follows that the measurement is also based on indicators that are more oriented towards human capital and the set of relations that the organization weaves internally and externally. One of the first works in this direction is the one of Hind et al. (1996). In their study on the organizational resilience, they identified 4 dimensions: change capability, organizational commitment, social relationships, team cohesion and reality perception. More recently, other scholars have developed wider evaluation scales by taking into consideration the psychological and behavioural aspects of individuals and the unstructured processes of an organization. Among these, Akgun and Keskin (2014) in their study on organizational resilience capacity and product innovativeness context, identified some relational and cognitive attributes based on the work of Lengnick-Hall and Beck (2005). Furthermore, Richtnér and Lofsten (2014) have more specifically defined which capabilities an organization should enhance to be resilient, and provided a 14-item scale measurement.

Lastly, Mallak & Yildiz (2016) developed an instrument to test the resilience of employees in the workplace. The test was conducted in the US hospitals and the test was administered between executives and nurses. The evaluation tool contained the 25 items revisited, the 16 items of Job Stress Questionnaire and demographic items. The resilience

scale provided was the one developed in his last work (Mallak, 1998b) and adjusted to be applicable also for other workplaces, not just healthcare sector.

1.5 Relation between Resilience and the concepts of Fragile, Robustness and Antifragile

To clarify the fragmented conceptual framework regarding the definitions of organizational resilience, Ruiz-Martin et al. (2018) introduce three different but related concepts to resilience: fragile, robustness and antifragile.

Taleb (2012) relates the concept of fragile to the characteristic of some organizations to break when they suffer periods of difficulty, and define antifragile as the property of organizations to overcome the crisis and emerge from turbulence strongest than before.

Subsequently, Woods (2015) introduces the feature of robustness, defining it as the ability of organizations to resist threats and absorb changes.

As highlighted by Woods (2015), the traditional concept of resilience - absorb changes and bounce back - is often confused with that of robustness. As stated by the author (Woods, 2015), improving robustness increases the set of disturbances that an organization can deal efficiently. Therefore, increasing robustness does not mean increase resilience and therefore the ability to recover after a shock. Moreover, according to the definition of robustness provided by Woods (2015) and to the consequences of the unpredictability of some shocks (Bhamra et al. 2011), enhance robustness does not guarantee the organization to survive to unknown events. Instead resilience is about preparing the organization for both known and unknown events.

While the concept of fragile is easily explained by understanding all those organizations that passively suffer the crisis and are unable to recover, the term antifragile is a relatively new concept introduced by Taleb (2012). In his book *"Antifragile. Things that gain from disorder"*, Taleb (2012) coined the term "antifragile" as a contraposition to fragile organizations. An antifragile organization can be defined as such when, in addition to resisting disruption events, it is able to improve thanks to the changes.

From the conceptualization of resilience and the factors that influence an organization's ability to recover from a shock, we can state that resilience is not a static concept, nor can it be defined as merely a goal. Resilience is a combination of factors that maintain continuity through challenges and the ability to survive long periods of stress (British Standard Institution, 2014). Consider it as the last and final stage of a process is a common

mistake. Resilience is instead a process that deserves to be constantly monitored, improved and measured over time. Strengthening resilience in an organization leads to both a change in business processes as a whole (set of actions, skills, abilities, processes and drivers), but also in the way of thinking. In this regard, the British Standard Institution (2017) has identified the five phases of resilience: Preventive control; Mindful action; Performance optimization; Adaptive Innovation; Paradoxical thinking.

Taleb's contribution (2012) adds another piece to the framework regarding organizational resilience, highlighting how an organization's ability to react to shocks does not just stop to being resilient, but should go further and be "antifragile". According to Taleb (2012), we can state that an organization evolves over time from being fragile to being antifragile, and resilience is a situation in between. Ruiz-Martin et al. (2018), suggest the four-level of Maturity Model for Organizational Resilience (MMOR), Figure 2. Depending on the level of capabilities, skills and individual resilience, an organization can be found in one of the following levels (Ruiz-Martin et al., 2018).

Figure 2: Maturity Model for Organizational Resilience

Source: Ruiz-Martin et al., 2018

1.6 Conclusion

In this chapter the essential but not sufficient tools have been provided to fully understand the concept of resilience. We first illustrated the general concept of resilience and how it was treated by multiple research areas. In fact, since the first publication of Holling in 1973 on ecological resilience, many researchers have expanded the concept by applying it to different fields of research. This allowed us to have a great deal of research and publications on the subject, making it possible to define and sometimes explain how some elements are able to withstand shocks of various levels. It has also been noted that

resilience is not only meant for the academic purpose but is now a term that has become of common use.

Keeping in mind the external environment in which the organizations live and carry forward their objectives, we proceeded to study the resilience from an organizational point of view. Although organizational resilience is a relatively new concept, numerous studies have also been carried out in this area. We proceeded therefore to provide first a conceptualization based on three levels of the literature present and then discussed the most important elements. Among these we focused on the capabilities that organizations must develop and, on the steps to be followed to be resilient.

From the picture provided so far it has been understood that resilience is not a stable concept or a goal to be achieved and then stabilized. Resilience is rather a dynamic concept, which concerns all areas of an organization and on which the human aspect plays a fundamental role. The last paragraph, then, discusses the tools concerning the measurement of resilience. As well as in the theoretical conceptualization, numerous studies have been carried out by the researchers. Many of these are based on surveys and on the relative elaboration of the results both from a qualitative and sometimes quantitative point of view. Few but important studies are still quantitative ones based on organizational performance indices. After a review of the literature, however, we believe that resilience must be studied and measured both through descriptive/qualitative and quantitative tools, so as to grasp all the possible nuances that such a broad concept brings with.

Having said that, it is easy to see how resilience is a sensitive topic for organizations and leveraging what a company can bring to be resilient is essential for success in both periods of stability and strong turbulences. The second chapter aims to clarify the drivers that allow an organization to take the right track and face an increasingly turbulent and competitive environmental context.

DRIVERS AFFECTING ORGANIZATIONAL RESILIENCE

2.1 Introduction

In Chapter 1, a conceptual resilience framework was presented. It was therefore understood that it is a relatively new concept at the organizational level and although many scholars have tried to study resilience, a shared conceptualization is still lacking. It was also considered necessary to highlight how resilience is not a static concept, and does not depend only on one factor. Increasing financial capabilities can certainly be useful to respond more easily to falls and underperformances in particular corporate areas. But it is equally important to allow individuals who are part of the organization to better express themselves, giving them the opportunity to be creative, dynamic and not be afraid of making mistakes. In fact, increasing the courage to act is one of the keys to increase individual resilience and therefore, as demonstrated by some scholars, also organizational resilience. These factors, combined with a flexible and non-vertical organizational structure, allow an organization to deal with the turbulences of the external environment without breaking.

Closely related to the above conceptualization, is the identification of which factors influence resilience. It is interesting to understand to which drivers an organization must aim in order to be resilient. Understanding which binaries an organization must grave in order to have a competitive advantage derived from resilience, allows us to respond to a recurring question: *What leads an organization to be resilient?*

In answering this question, the chapter comes up with the major *drivers* that lead companies to be resilient. The identification of the following drivers was suggested by a review of the literature that involved various fields of study. In particular, Pirotti and

Venzin (2014) in their research have noticed how organizations are influenced by seven principles, which make a healthy and prudent organization. The chapter will take into consideration the work of the two scholars and will suggest a development of the drivers that best meets the objective of the following work. The drivers that will be discussed are:

- Being Authentic
- Customer centricity
- Business diversification
- Long-term orientation
- Strategic decision making

Each following paragraph will focus on a particular driver. Reference literature and empirical studies will be presented demonstrating how some factors influence more than others the performance and ability of organizations to be resilient. For an easier interpretation of what is stated, some case study will be also reported. For the sake of completeness, some researches that show the opposite point of view will also be discussed. Some drivers such as the focus on the product or on a particular geographic area do not always have a positive influence on the performance of companies.

On this point, however, a theoretical clarification is necessary: as can be seen from Chapter 1 and the revision of the reference literature, company performance and the classic measurement tools do not give information on the ability to be resilient. Drivers related to long-term orientation (see paragraph 2.5) and strategic decision-making (see paragraph 2.6) provide a more complete picture of how companies, in order to be resilient, must not only aim to increase income performance in the short term, but must also act on their mentality and organizational structure. The economic and financial crisis of 2007 revealed how many companies, aiming at maximizing results in the short term by focusing on shareholder, paid a very high price in terms of long-term sustainability.

2.2 Being Authentic

The concept of *authenticity* in economics has aroused increasing interest and space in recent times. This trend has also been driven by globalization, which, on the one hand, has opened the frontiers of commerce and culture, but, on the other hand, it has led people to regain interest in authenticity (Pirotti and Venzin, 2014). The reasons behind this trend reversal compared to past decades are various (Eggers et al., 2013). Consumers' spotlights

have come not only on the value of the product and its extrinsic goodness, but also on the authenticity of the brand and the values of the companies. An example of what has been said is the problem of counterfeiting in the fashion sector, or the problem of the long food supply chain.

According to some scholars, promoting the authenticity of a brand is a key source of competitive advantage, especially in particular moments of economic stress and trust erosion (Eggers et al., 2013). This is particularly true if we look, for example, at the 4Fs of the Made in Italy. In fact, Italy is internationally recognized as a brand of authenticity for some production processes that characterize the Italian manufacturing industry (see among others Fortis, 1998). Some Italian brands of Made in Italy have represented the flywheels for the Italian economy thanks to their ability to build brand confidence and transmit authentic values that have deep roots.

Explaining the meaning of authenticity is rather complex. Starting from Heidegger and Sartre, philosophers and sociologists for decades discussed the meaning of the term, giving free interpretation of the concept and its characteristics. According to the distinction of authenticity made by Carroll and Wheaton (2009), two types of authenticity can be identified:

- Authenticity of type
- Moral authenticity

2.2.1 Type of authenticity

This kind of authenticity is the first driver that leads an organization to be resilient. Starting from a general concept, talking about *authenticity of type* means recognizing the organization's core business and levering on it to increase trust and trustworthiness towards the outside. This means having a deep knowledge of the organization and its capabilities, and focusing on a few but good products and on coherent market areas (Pirotti and Venzin, 2014). This makes the brand unique, identifying the company as the market leader. Achieving this goal means transmitting trust, attachment to the organization's services and coherence towards history and values.

When organizations are not able to focus on their core business, they risk confusing their customers, that consequently they no longer trust the brand. For instance, when choosing a particular type of cuisine, an expectation is created that leads individuals to imagine a

certain scenario that characterizes the local culture. So, if you decide to go to the Chinese restaurant, you expect to find some typical elements of Chinese cuisine and culture, which can absolutely not be confused with those of another place. If instead we find some elements that are not strictly identifiable as references to the culture (such as the furniture or the menu) we will be led to a state of confusion and a probable lack of trust (Pirotti and Venzin, 2014).

Case study 1: Type of authenticity - Elisabetta Franchi

> Made in Italy in this field is full of excellent examples of authenticity of type. From fashion to food, from furniture to automation, Italian companies have always valued their core businesses. An example is the Elisabetta Franchi brand, led by namesake fashion designer and jewel of Italian fashion sector. The success of the Elisabetta Franchi brand is linked to the stylist's ability to interpret and satisfy women's desire for femininity and Italianness. As a consequence, all its products are immediately recognizable by their unique style and the reference to the Made in Italy manufacturing culture (Elisabetta Franchi, 2018).

2.2.2 Moral authenticity

To speak of *moral authenticity* means to refer to the set of rules, values and beliefs of an organization. The set of all these elements forms the organizational culture, which finds its roots in the ideas and beliefs of the person who founded the organization (Pirotti and Venzin, 2014). Often organizational culture has been the subject of studies, not only from a theoretical point of view, but also related to company performance. In fact, studies such as that of Kotter and Heskett (1992) or Robbins (1998) provide support for the thesis that enhancing one's own culture and not being afraid to compare it with that of others has a positive influence on the performance of the members of the organization.

Since the culture of an organization is a set of values, it can change over time because of the individuals who are part of the organization and exert a strong influence on it. Often, in various theoretical frameworks, it was discussed how much an organizational culture born in a certain place could be transferred beyond boundaries. According to Carroll and Wheaton (2009), an organization is defined as authentic if, despite its presence in other nations, it embodies the values and traditions of the place of origin and its founders. Being recognized as a company with values, principles and consistency with the history of the organization, is one of the drivers that distinguishes resilient companies.

Case study 2: Moral authenticity - Ca' del Bosco

> An example of moral authenticity comes once again from one of the most recognized Made in Italy sectors: Food & Beverage. "Ca' del Bosco", a winemakinghouse of Franciacorta, has immediately had clear values on which to grow the organization, establishing what they call "The metodo Ca' del Bosco"

(Ca' del Bosco, 2018). As reported on their website, following the Ca' del Bosco method means following one's own way, even if this means having a longer and more difficult process. For them tradition does not mean adoration of the past, but combine innovation with love for nature and quality. Their values are recognized among all lovers of quality wine, and thanks to them they have been able to grow and become a reference winery in the Italian panorama.

2.3 Customer centricity

The concept of *consumer centrality* is not new, even if sometimes underestimated. Already in the 50s a change of perspective in the way of doing business was made in the reference reading. For instance, Drucker (1954 as cited in Shah et al., 2006) was one of the first scholars to state that it is the client who determines what an organization has to produce. It is therefore the consumer the true influencer of the way of doing business. Subsequently, other authors continued to argue that a company should not sell products but rather satisfy consumers' needs (Adrodegari et al., 2007). But not only scholars are aware of this, many managers in recent decades have changed their production processes and, in some cases, to reorganize the entire organization. One direct example is the Audi's initiative called "Audi experience" in which the managers visited some of their client's families to ask what their needs were. In the same way many tech companies are often oriented to sell a product that is "the object of desire" of consumers, involving them in the processes of design, development, launch. Other brands, such as Apple, have made the customers care and their satisfaction and assistance almost an obsession. Many examples of this type could be listed. Towers (2010, as cited in Pirotti and Venzin, 2014) reformulates the organizational structure according to which the consumer was the last step in the production chain, introducing the concept of *"outside-in"*. Outside-in thinking does not just mean follow in detail what consumers are asking for. Consumers may not have the ability to articulate their needs. Rather the approach consists in creating creative processes that lead to understanding the problems of the organization and the unexpressed wishes of consumers (Gulati, 2009). It is a combination of organization's skills and technology, ability to understand market trends and consumers' needs (Gulati, 2009). This approach considers customers at the centre of the organizational structure, no longer an individual outside the company. It can be traced back to some so-called "co-design" cases, where customers are called to be protagonists of the production process. The ability to customize the product and make it as similar to consumer needs is one of the keys that make the customer feel like an integral part of an organization. An example of this is the Timberland initiative which has decided to launch an innovative service called

Timberland DYO, Design Your Own (Timberland, 2018). Through a dedicated website, customers can customize their shoes by venturing into the customization process based on their preferences.

Despite these virtuous examples, many organizations still lack to adopt similar strategies or sometimes they do not know how to start a reorganization processes that see consumers at the centre of their business rather than the product (Shah et al., 2006). This represents a loss both in terms of performance indicators and competitive advantage over their peers. It has indeed been calculated (Marcus and Collins, 2003, as cited in Shah et al., 2006) that organizations that invest more than half of their time in consumer-centricity strategies are able to have a Return on Investment (ROI) of more than 30% compared to competitors who lack such emphasis. A recent study carried out by the German Quality and Finance Institute (2013) investigated the appreciation of the service of some companies by Italians. More than 90 companies have been awarded "gold", i.e. companies that provide optimal service to their customers. It is no coincidence that among the companies with the highest score there are some brands of Italian manufacturing (such as NeroGiardini) that in the last few decades have seen their business grow.

Case study 3: Customer-centricity - NeroGiardini

Moreover, in the last few years, NeroGiardini has been an example of how customer centricity can be achieved through greater efficiency of internal processes within the company. A crucial role is played by the coordination and exchange of information between the various manufacturing sites in order to have a product that meets the needs of the customers (Pirotti and Venzin, 2014)

Adopting a customer centricity strategy is not just a choice between customer satisfaction and the production side of a company. In fact, according to Pirotti and Venzin (2014), the idea according to which the return of the shareholders must be maximized, even if this is to the detriment of its customers, should also be changed. This perspective has evident managerial gaps that have led in some cases to very serious business and economic crises (Pirotti and Venzin, 2014). It is enough to think about the collapse of some American banks during the Wall Street crisis in 2008. Although the causes that led to the biggest crisis after the recession of the '30s are not only due to a lack of attention to the customer, it is without a shadow of a doubt that the choice to focus on the maximum profit possible without taking care of the interests of shareholders has led to make decisions that are profitable for a few but highly detrimental for many.

For instance, Gebauer et al. (2011) carried out a study on 365 European manufacturing companies. The results show how organizations that have followed the complexity of consumer needs by adopting a consumer centricity strategy are those that have increased business performance. Gebauer et al. (2011) also indicates innovation as a determinant for success. In fact, from the survey carried out innovation plays a fundamental role, and sometimes superior, to increase company performance. Similarly, Sabatino (2016) carried out a qualitative study of the business reality in Sicily, structured both in interviews and in questions. From the survey (Sabatino, 2016) it emerged that one of the fundamental determinants (out of a total of seven) that define an organization as resilient is that of customer centricity.

According to the second edition of the KPMG Customer Experience Excellence (CEE) Center survey, Italian companies are making important progress, especially in some industries. The results show that the level of competition on the Customer Experience has increased overall among Italian companies.

2.3.1 Innovation

The study of Gebauer et al. (2011) has shown how *innovation* can lead to higher company performances. In particular, in customer-centricity strategies, technological innovation plays a crucial role in anticipating customer needs (Pirotti and Venzin, 2014). Many of the brands and products that today are known and used daily are the result of exciting technological innovations that have sometimes anticipated the needs of customers. An example of this is the launch of Apple's iPad and iPhone on the market, which has responded to a need that many consumers have probably never even asked themselves. This has turned into a competitive advantage over competitors who found themselves chasing a product that was already on the market and that was attracting millions of customers.

Technological innovation has also given rise to a series of technologies that exploit the huge amount of information, i.e. *big data*. The study of big data allows organizations to cut out services and products that are more and more precise towards customer needs. While the use of these technologies opens up a problem concerning privacy (such as the scandal involving Cambridge Analytica and Facebook), on the other hand it opens up interesting scenarios. In fact, according to a study carried out by Nomisma, 3 out of 4

companies (71.5%) that use big data technology can increase productivity or turnover and to develop new processes and products (Repubblica, 2010).

2.4 Business diversification

The concept of *diversification* as a business strategy has been the subject of debate among many scholars. Talking about business diversification means referring to two main strategies: product diversification and geographic diversification. While the first concept essentially refers to the company's decision to diversify the portfolio of products and skills to offer to customers or focus on its core business, geographic diversification refers to the organization's choice to enter new markets or with which strategy. Empirical evidence and seminal works of many scholars have shown that there is no univocal answer on which strategy is better. The choice of diversification lies mainly with the individual company strategy and its ability to structure itself (Datta et al., 1991).

2.4.1 Product diversification

A key part of any organization's strategy is the *diversification of the product*. It refers to the choice of which product portfolio to compete in the market (Markides and Williamson, 1994). The choice of diversifying or focusing on a few products or services mainly concerns the company's ability to maximize its performance. Several researchers have studied the relation between product diversification and performance (among others, Chatterjee and Wernerfelt, 1991; Miller, 2004). The decision whether to have a large portfolio of products or to focus on a few depends mainly on the ability of the organization to put together its resources. This approach is influenced by the resource-based view (RBV). The RBV suggests that the ability of a company to propose its unique diversification depends on the set of resources and skills it is able to put together and manage (Pirotti and Venzin, 2014) in order to have medium-high company performances. Although it is not possible to identify a level of diversification suitable for all organizations, the study by Pirotti and Venzin (2014) suggests that the most resilient companies are those that simplify their organizational structure and focus on what they do best (core competences). In their research, Pirotti and Venzin (2014) conducted a study on the automotive industry through their developed "VOLARE index" (see paragraph 1.4). One therefore realizes how some companies (for example Porsche and Audi) that have concentrated their production and their skills on a few products have a much higher

resilience index than the competitors who have decided to adopt an extended diversification (for example Peugeot and Ford).

2.4.2 Geographical diversification

Along with the choice of product diversification, organizations often find themselves having to decide the level of internationalization of their business. According to Hitt et al. (1997) *international diversification* can be defined as the presence of organization beyond its home market. The level of internationalization can be measured by the number of foreign markets covered through its products and plants or by the weight that these markets have on the total sales of the company (Doerrenbaecher, 2000). As in the case of product diversification, even for geographical diversification there is no univocal opinion among scholars. The decision to enter new markets is a decision that is up to management based on organization's features and goals.

The study of the relationship between performance and international expansion has seen conflicting results emerged. Empirical research such as Brammer et al. (2006) show, for example, a strong correlation between geographic diversification and corporate social performance (CSP). Other seminal works have studied the same relationship suggesting how it can be seen as linear or studied with more complex shapes such as a U-shaped, a inverted U-shaped or S-shaped curve (Pirotti and Venzin, 2014).

As some scholars have claimed and as some corporate cases show, high levels of performance do not always match a high level of resilience. In fact, according to Pirotti and Venzin (2014) the organizations that have proved to be most resilient are those that have decided to be more cautious in the process of internationalization. This does not mean that organizations to be resilient must close in domestic boundaries, but rather have to discover their internationalization dimension. Therefore, it is essential to invest and maintain its home market as an element of strength and invest in geographical areas consistent with its business strategy.

Case study 4: Business focus - Cesare Paciotti

> The ability of organizations to scrupulously choose the level of diversification and the territories in which they are present determine their level of performance and resilience. It is quite evident, however, that although the decision is well considered, there are determinants that can not always be calculated. But as stated above, if an organization is able to affirm and maintain its identity even abroad, it can survive stressful periods. For example, the case of Cesare Paciotti, the famous Italian shoes maison that has come out even stronger from the crisis that hit the company. In 2013 the organization drastically decreased its turnover due to the collapse of the Russian market, the main business place of the Cesare Paciotti brand. A shock that Italy, the first country by revenue, could not recover completely. Despite the

difficult situation, the company does not give up and continues to insist on enhancing the quality and style made in Italy. In 2016 it returns to grow thanks to its presence on new European markets and thanks to the distribution of its products in Asia. (Crivelli, 2017)

2.5 Long-term orientation

From an analysis of business cases, and from the study of the literature, it is clear that one of the main challenges facing companies is to have a *long-term orientation*. As a product-oriented orientation may lead organizations to poor long-term results, even a short-term outlook can hurt the company's performance.

Some scholars have linked this problem to different aspects within the company. For example, if we assume that the number of companies on the market is roughly 70% to 90% made up of family businesses (Zellweger, 2017), it is clear that the difficulties are often linked to the governance of organizations. In fact, according to Feltham et al. (2005) three-quarters of respondents to a survey that saw 765 family-business entrepreneurs interviewed overall, said that the organization is heavily dependent on one person.

The attitude of the entrepreneurs in the family businesses to feel at the centre of the organization and irreplaceable makes its replacement problematic. Feltham et al. (2005) highlighted that more than 60% (out of 765) of the entrepreneurs of family businesses interviewed has not yet chosen his successor nor has he identified a path to do so.

The problem of a lack of long-term perspective where corporate goals are not well-planned is also present in large non-family businesses. It is in fact a phenomenon recognized on a large scale as the heads of large multinationals have a too high turnover. However, Huson et al. (2001) have studied CEOs turnover during the 1971 to 1994 period and they showed that there is no relationship between the frequency of change of CEOs and the performance of the organization. From a recent research by Pirotti and Venzin (2014) it was highlighted how the ability of CEOs to think about leaving the organization paving the way for successors increases the company's ability to be resilient.

What has been said makes us realize how difficult it is to have a long-term orientation if we adopt a *market-based approach*. Instead, organizations operate in contexts that evolve continuously, where the introduction of new technologies or disruption events can change not only the sector of reference but also force the organization to restructure to adapt to change. Resilient companies are those that adopt a long-term perspective focusing on their own resources, leveraging their core competences and developing distinctive activities that can have a good return in the long term (Pirotti and Venzin, 2014).

A persistent concept in the literature concerning business strategies and long-term orientation is that of an organization's ability to be ambidextrous. The use of this term was first approached by humanistic view. It refers to the ability of an individual to use both hands with the same ability. In organizational theories, it can be studied as the ability of companies to exploit existing situations as well as exploring new opportunities with the same dexterity (Lubatkin, et al., 2006). Numerous researches in various fields related to economics and management has contributed to the exploration of the organizational ambidexterity as a prerequisite for a company to survive and succeed (Raisch and Birkinshaw, 2008). Moreover, according to O'Reilly (2013) ambidexterity has been positively associated with increased sales, improvements in performance indices, innovation, and firm survival.

Having the ability to manage both everyday problems and also having a clear perspective for the future is therefore the basis of a performing organization and a driver for resilience.

2.5.1 Digital Transformation

Digital technology is increasingly having a strong impact on the way of doing business, overturning the organizational structures and redefining the business under a new key. Digital is no longer just an innovative trend to study, but for many organizations it is becoming the core business.

In recent years companies in all industries are experimenting the integration of new technologies within their organizational structures, implying a substantial change in the way they carry out business. This migration between non-digital systems and digitized systems is called *digital transformation*. The use and implementation of these new technologies often involves a large part of the organization and goes beyond a mere redefinition of the organizational structure, also affecting the production, processes, products and supply chain (Matt et al., 2015). Although the digital world is very wide and the investment choices can be influenced by many factors, we can identify some factors in common between the various strategies of implementation of new technologies. Matt et al. (2015) have identified 4 dimensions of the digital transformation. A brief introduction to each of them helps to understand how new technologies can be used by management to turn organizations into resilient.

- Use of technologies: The use of technologies can be seen as a continuous cycle that causes organizations to be more inclined to expand their technological boundaries.

An organization that decides to undertake a digital transformation path must decide whether it wants to become a market leader in the use of those technologies or take advantage of strategies already present and implement them in the business operations. If, in the first case, organizations can have a strong competitive advantage over peers, companies that decide to adopt technologies already used by others reduce the risks due to exploration and require less domain expertise.

- Changes in value creation: From a business point of view, digital transformation processes also bring changes in value creation processes. Organizations that implement new technologies in their production processes can expand their products and services. The change in the production chain is also given by the stimuli of consumers, who with the individual use of technology stimulate companies to satisfy increasingly different and customized needs.

- structural changes: The implementation and use of new technologies implies a change in the organization structure. It refers to the complexity of organizational processes, both in terms of administration and aspects related to operations. This dimension is probably the one in which there will be more obstacles, above all for the resistance to change by the employees (Tiersky, 2017). The change is directly proportional to the level of innovation that you want to introduce to the company: therefore, lower levels of digital transformation will correspond to the integration of new technologies to the existing structure, instead higher levels will involve a substantial change in the organization.

- Financial aspects: As in all strategic investments, the financial aspect plays a role of primary importance. The availability of a digital transformation process can be both a limitation and a guide. While in the first case, having limited financial resources can cause organizations to delay the implementation of new technologies and lose important opportunities, it can sometimes be used to plan the necessary investments in a reliable and weighted manner.

According to Matt et al. (2015), organizations that decide to implement digital transformation strategies must also consider some procedural aspects. As changes are very risky process, it is important for an organization to allocate clear responsibilities. Underestimating transformational processes, especially digital ones, can lead organizations to lose their initial purpose and to encounter difficulties in implementation.

People who are in charge of digital transformation path must have sufficient experience and must understand the company's targets well. Moreover, since the technological industry is constantly evolving, organizations must be ready to adapt their technologies to new ones. This process implies that the companies and the staff in charge constantly follow the trends related to the technologies and how the market changes.

According to a study by Kane et al. (2017), investing in new technologies means playing on the long term. The authors highlight how the strategic planning of companies that have begun to invest in innovation is longer than those that do not yet.

Through the study of Kane et al. (2017), it can be shown that companies that have had or are implementing technological innovation processes are the ones that are most successful in planning changes in consumers, customers and employees. Having a clear vision of changes in the market helps organizations to anticipate trends and achieve a competitive advantage that can be transformed into a greater ability to resist and better withstand turbulence and changes in the external environment.

The link between innovation and performance is also confirmed by empirical analyzes based on the estimation of a production function that includes investments in R&D. (Accetturo et al., 2013). A study by Klette and Kortum (2004) shows a positive relationship between research and development investments and the increase in productivity of a company. In particular, some scholars (among others Parisi et al., 2006) have studied the case of the Italian system, finding even higher performance correlated investments for process innovation compared to that of product. In fact, it is now recognized that the acquisition of new machinery or the development of new organizational forms of production has a greater direct positive effect on productivity (Accetturo et al., 2013).

Case study 5: Long-term orientation - Walmart

A leading case that has used new technologies to have a long-term orientation is that of Walmart. In recent years, the US company has made huge investments in technologies in order to renew the organizational structure and keep up with the times with respect to a constantly changing market. From the innovations made to the supply chain to the strategic purchases of some companies and start-ups, Walmart has implemented a strategy that does not just look at what is there today to take a step towards tomorrow. The retail company has created a strategy that looks at what the organization can do from here to 10 years through the use of technologies. And so, starting in 2016, the purchase of some e-commerce companies was completed, like yet.com, and in 2017 ShoeBuy.com. Their strategy is not only limited to the implementation of new technologies and the acquisition of potential competitors, but also to the recruitment of new talents who are ready to implement the innovations of the future. (Kane et al., 2017)

2.6 Decision - making process

The study of decision-making process is a very important search stream within the management field. In fact, it is evident that many companies have problems in making strategic decisions, sometimes due to structural problems within the organization (many organizational levels, too large teams, lack of method), other times due to problems related to staff (management too generalists, too many short incentives). The decision process is triggered when the management of an organization, faced with a problem, must make an important decision with a consequence (Nutt, 2017).

Within an organization, deciding can take a long time and can also vary depending on the context in which decisions are made (top management or departmental) and the type of decision, based on whether it is strategic, complex, urgent (Nutt, 2017). Particularly important is also the condition of the organization or of those who must make decisions: in fact, situations of uncertainty or resistance can compromise the integrity and the decision-making process.

In situations with a very high level of uncertainty and high volatility, it is therefore necessary to leverage the need to make quick decisions. Several scholars (among others Schweiger et al., 1986) have suggested how the quality of decisions is also influenced by the speed at which they are taken. As studied by Perlow et al. (2002) making quick decisions has a double aspect: if on the one hand it can help to analyse information more efficiently, on the other hand it can damage the performance of individual tasks. However, making quick decisions can create damage, but on the contrary, lengthy decision-making can lead companies to lose itself in bureaucracy and internal processes, losing the opportunities of the market. According to the study of Pirotti and Venzin (2014) some countries, especially those of Far East like China and Korea, have made speed a capacity they can no longer do without.

Case study 6: Decision-making process - Huawei

> For example, Huawei interprets the speed not only its slogan but also their way of operating. This, together with other drivers such as customer-centricity and a strong propensity for innovation, has led Huawei to be not only a world leader in telephony, but also the first telephone manufacturer in the world, even surpassing Apple (Luca Tremolada).

The most resilient organizations are those that are able to combine speed and quality in decision-making processes. This leads one to think that there is no trade-off between speed and quality, but rather an organization must aim to find a balance between the two.

Managers or more generally decision-makers are subject to systematic distortions that lead to errors in evaluations and therefore to making harmful decisions. Many scholars have analyzed which factors damage the decision-making process, suggesting how the causes can come from internal aspects of the organization, with particular reference to the cognitive skills of decision-makers. For example, Samuelson and Zeckhauser (1988) through their research have shown that many decisions are influenced by the status quo, understood as the fear of dealing with what is not known. Many scholars have analyzed which factors damage the decision-making process, suggesting how the causes can come from internal aspects of the organization, with particular reference to the cognitive skills of decision-makers. For example, Samuelson and Zeckhauser (1988) through their research have shown that many decisions are influenced by the status quo, understood as the fear of dealing with what is not known. Schwenk (1988) identifies other decision biases, including the availability that triggers when an event is perceived as similar to the past if it shares some characteristics. Similar to availability is the underestimation of the consequences that a decision can bring. Another bias widely studied in literature is that of hindsight, i.e. being too confident with the past (Christensen-Szalanski and Willham, 1991).

The listed bias can only be some of the constraints that managers can face. Underestimating the management of difficulties in decision-making processes can also lead to strong implications in the business. The ability of an organization to make efficient decisions therefore affects its ability to respond promptly to the turbulence of the external environment and therefore to be resilient (Pirotti and Venzin, 2014).

2.6.1 7 steps to effective decision making

Making decisions can sometimes be very complex, both for the difficulties of the outside world and for the bias listed above. The literature presents different approaches and strategies to get to have a weighted and reliable decision process. The adoption of a step-by-step approach therefore seems to be the best way to overcome any pitfalls. Through a review of the literature and taking into consideration the studies of the University of Massachusetts Aamherst (n.d.) and Garvin (1993), it is possible to identify 7 steps:

- Identify the problem: Recognizing the problem or the need to make a decision is without a shadow of a doubt the first step a decision-maker has to make. A careful evaluation and control of what is happening is essential for the following steps.

- Gather information: The second step is about researching, collecting and tidying up all the information that can be found. Resources will be the basis for evaluating decisions, so it is advisable to make a collection as complete and reliable as possible. Persons outside the decision-making group must also be involved in this process and information must be collected both internally and externally. It often happens that information is wrong, incomplete or partial. It is therefore necessary before proceeding to the next step to choose the most appropriate information based on the source and the objective of the decision.

- Generate potential alternatives: Once the problem has been clarified and the relative information obtained, the various alternatives must be evaluated. The optimal solution in this case would be to have as many solutions as possible. Having a wide range of actions allows both an assessment of the most complete alternatives and the opportunity to model the decision in case some variables change.

- Weigh the evidence: In the fourth step we will proceed to weigh the alternatives based on the information we have and the result we want to achieve. In doing so you will imagine what consequences the different alternatives proposed in the previous step are feasible and if they represent a solution to the problems recognized in the phase number 1. In this step it will not be necessary to consider only one possible decision. But it will instead be appropriate to make a ranking of which solution is more effective than the other.

- Choose among the alternatives: Step 5 is the one in which you will actually choose which alternative to adopt. It is essential in this process to make sure that all risks have been considered. The decision taken may be the first of the rank made in step 4, but it could also be a combination of alternatives.

- Act: This phase, probably one of the most delicate, involves the implementation of what was decided in the previous step. To do this it is necessary to prepare a plan that includes both the necessary resources and the people involved. In particular, the involvement of some individuals may be crucial for a favorable outcome.

- Review your decision: The last step is often overlooked but it is probably also the most important. It implies a constant monitoring of the decision taken and, if this does not give the desired results, it is essential to be ready to change the decision taken.

2.7 Conclusion

In this chapter we started by asking the reader a question: "What leads an organization to be resilient?". Although it is a very common question in the studies on organizational resilience and although it may seem easy to answer, what the academy and the business environment have provided us with is a very fragmented picture. There are many cases of companies that have become resilient by relying on some characteristics of the organization, and which are therefore not imitable. Therefore, a literature review was carried out, identifying multiple drivers. The research of Pirotti and Venzin (2014) was particularly inspiring and by a detailed study of the entrepreneurial realities. Starting from the seven drivers identified by the scholars we proceeded to elaborate them, adapting them to the specificity of this work and enriching the study with other papers. For the sake of completeness, some researches that show the opposite will also be reported. For each driver a short case study has also been described.

The study on drivers will be taken again in reference and completed in Chapter 4, where the results of a study based on the quasi-medium of made in Italy will be discussed. Therefore, in Chapter 3 we will discuss the necessary tools to know the sample taken in reference. It was considered appropriate to first explain the definition of Made in Italy and highlight the characteristics that have allowed it to be the backbone of Italian companies. Further qualitative elements concerning the fourth Italian capitalism will also be provided.

THE QUASI-MEDIUM OF THE MADE IN ITALY: A LONGITUDINAL ANALYSIS FROM 2007 TO 2017

3.1 Introduction

In the first two chapters, an overview was provided to understand the concept of organizational resilience and on which drivers companies in order to leverage to increase their resilience and performance capacity. In particular, briefly summarizing, resilience is defined as an organization's ability to resist to turbulences and return to its initial stage or an even more advantageous one. Subsequently we discussed the major drivers that positively influence resilience. Numerous studies have been cited to wrap such as authenticity, customer centricity, keeping a focus on core competencies and some aspects of corporate governance can affect companies' success. From now on, the focus will be on a particular segment of the immense panorama of business organizations. For our study we will consider the Quasi-Medium sized firms of Made in Italy.

In particular in the Paragraph 3.2 we will discuss the meaning of the Made in Italy and industrial districts through a journey in the Italian production system, and the prejudice that the Italian industry is only Ferrari, Valentino and Gucci will be knocked down. The strengths of Italian manufacturing and the geographic structure are therefore discussed, highlighting how Made in Italy phenomenon is a well-rooted reality in the country and, how in the years of the crisis, it has been the driving force of the Italian economy. In Paragraph 3.4, taking into consideration one of the most important features of Made in Italy, i.e. the fact of being small and medium, it will be analyzed why many companies prefer to remain small and which factors can be leveraged in order to grow.

Finally, taking as a starting point the study of Gubitta, Tognazzo, Favaron (2013) *"Lepri che vincono la crisi. Storie di aziende (quasi medie) vincenti nei mercati globali"* we weill proceed to a longitudinal study of 1554 quasi-medium enterprises of Made in Italy. The only companies that at the outbreak of the crisis (2007) had a turnover of 10 - 12.99 million euro and were part of the Made in Italy 4Fs (Fashion & Apparel, Automation & Mechanics, Furniture & Home Appliances and Food & Beverages) will be taken into consideration. Therefore, a longitudinal study will be carry out with the aim of updating the data and studying how the companies of the aforementioned sample have changed. In particular, the sample will be studied with regard to the companies' legal status, their geographical area and the Made in Italy industry they belong to. Finally, a representation of the companies that changed their revenues position over the 10 years was provided.

3.2 What is Made in Italy?

The expression *Made in Italy* is often mistakenly associated only to fashion products of Valentino o Versace or to luxury cars like Ferrari. Nonetheless, Made in Italy refers to much more than that and it is considered like a copyright, an hallmark that relates to something unique and distinctive. Fortis (1998) believes that Made in Italy relates to those products and services which Italy is praised for and has a great experience with. Quality, innovation, design, customer support, delivery timelines, competitive prices are the features which Made in Italy is widely known for, all over the world. It has become a symbol of excellence worldwide (Fortis, 1998). The so-called "Made in Italy" includes the economic activities that fall within some very specific manufacturing sectors (Food-Beverage, Fashion & Apparel, Furniture & Home appliances and Automation & Mechanics). In 2017, the Made in Italy recorded a + 7.4% of exports, for a total value of 48 billion (Giorgio, 2018).

After years and years of constant but gradual growth of numerous specialized companies and industrial districts in the whole country, Italy has definitely become a market to look up to with regards to fashion products, furniture, home appliances, either of big or small dimensions, products of the automation and mechanics industry and lastly food and beverages. Specifically, this last one kind of products took advantage from the growing importance given by the scientific community to the Mediterranean diet. This widely accepted qualitative definition emphasizes the strong Italian specialization in dressing

well, in Mediterranean cuisine, in offering products for free time and sport, in furnishing and making the home more functional (Curzio and Fortis, 2000).

Fortis (1998) states that a common feature of these types of products is represented by art, specifically the art of working a particular raw material, whatever that is. Italian companies hold a record related to volumes of transformed raw material but also related to the tremendously high levels of knowledge reached by Italian firms in using some raw materials for certain purposes, for example the plastic utilized for ski boots or the peculiar metals and alloys used for glasses frames. Made in Italy was born thanks to a long-standing experience, basically unique in the world, in transforming raw materials, which is often century-old.

To the qualitative definition of Made in Italy, a quantitative definition can also be identified. This takes into consideration the possibility of identifying trade specializations through the *«normalized trade balance»* tool (Curzio and Fortis, 2000).

An additional feature of Made in Italy production is the organization of this very production (Fortis, 1998). As a matter of fact, the majority of Made in Italy output comes from deeply specialized industrial districts. In these districts, efficient relationships are established among enterprises (Fortis, 1998), which generate common benefits for all. Within the district, companies have the possibility to exchange semi-finished products, technologies, service and also knowledge. In particular, the know-how, in these agglomerates, develops so much that it reaches extremely high levels, thanks also to centenary artisanal traditions or to industrial experience which blossomed from pioneer companies and that, as a consequence, spread in the nearby territory with additional established firms. As Beccattini (1989, as cited in Fortis, 1998) names it, in these districts, the "contextual knowledge" is constantly enriched. By "contextual knowledge" he refers to that set of non-codified knowledge that prospers among many different companies that are located in the same local territory.

Made in Italy includes also the manufacturing of specialized machines (Fortis, 1998). Being experts in producing furniture, home appliances, clothing, food, beverages, etc., Italian companies have developed also in the creation of those machines necessary to work raw materials and eventually manufacture the products.

To be highlighted is the fact that Made in Italy has always been innovating and improving its offer (Fortis, 1998). Innovation relates to both processes and products, sometimes

being quite radical. It also refers to a constant proposal of avant-garde design, being it for fashion products but also for furniture and home appliances.

Made in Italy companies have been also able to conquer leadership in many niche markets (Fortis, 1998), which are difficult to attack and overwhelm.

The interest for Made in Italy has considerably increased in recent years. For several years now, press and observers from all over the world have also shown great interest in the Italian development model, based on traditional sectors and specialized industrial districts.

3.3 Why Made in Italy is the backbone if Italian companies?

To understand the fundamental contribution of Made in Italy companies to the economy of the country, it is necessary to know first and foremost the protagonists, and then compare them with the foreign trade and trade balance.

The Italian production system, unlike that of other European countries, has unique characteristics (Fortis, 2005). From an initial analysis, it should be emphasized that Italy is proportionally more oriented towards manufacturing activities than other countries. It should also be noted that, despite the considerable efforts, Italy is not yet present in the high-tech industry, with a consequent large gap in Italian R&D investment compared to other more advanced countries. Another distinctive feature of the Italian production system is the low number of large companies. The Italian manufacturing industry reacted to this anomaly through medium-small companies with a strong influence of the family capitalism.

The characteristics and authenticity of the Made in Italy brand are reflected in a series of records that bode well for the country's economy. According to Fondazione Symbola, Unioncamere, and Fondazione Edison (2017) in the period from 2014 to 2016, Italian exports grew by 26.7 billion euros, second best performance in absolute terms among the 4 largest Eurozone countries after Germany.

Also, in 2016, the export of 4Fs drove the national economy, managing to offset the deficit in the less specialized sectors. Specifically, over the 60% (127 bilion euro) was generated by the Automation&Mechanics, followed by Fashion&Apparel with 26 billion euro, by the Furniture&Home with 13 billions euro and, at the end, by the Food&Beverage that contributed with a surplus of 9 billion euros.

As will be discussed later, a role of primary importance has also been played by industrial districts. Exports, after falling dramatically at the end of 2009 following the economic recession, have recorded an increase of around 30 billion euro. This figure, which is even higher than the pre-crisis levels, is therefore in line with the positive results of Made in Italy, demonstrating that the Italian production system is a leading player in the global economic scene (Fondazione Symbola, Unioncamere, and Fondazione Edison, 2017).

With reference to the employment rate, according to Istat for the 2017 census, after three years of uninterrupted employment growth, the total number of employees returned to 2008 level (23 milioni), with an equal employment rate at 44.2%. Furthermore, in this case the Made in Italy goes against the trend, registering generally higher values, with an average employment rate of 46.5%. In particular, the more specialized industrial districts of Made in Italy record 49.2% of employees, with a share of the national total of 27.1%. According to the elaboration of the CAN (2018) on the Istat 2017 census, increases in the employment rate are also found in those districts characterized by the presence of small and medium enterprises as in the case of the local textile and clothing system in Casarano (LE) (+10.9 %), of the local leather and leather system in Minervino Murge (BT) (+ 10.1%) and by the local systems in Giulianova (TE) (+ 3.6%) and Teramo (TE) (+ 3.6%). In the end, employment increased in all the local districts of Made in Italy: textiles and clothing + 1.8%; leather and leather + 1.8%; Manufacture of machines + 2.0%; wood and furniture + 1.9%; agri-food + 1.9%; jewelry, glasses and musical instruments + 2.2%.

3.3.1 Made in Italy on the podium

The Italian trade balance in 2016 reached 51.6 billion euro, reaching a further record (Fondazione Symbola, Unioncamere, Fondazione Edison, 2017). We have the fifth manufacturing trade surplus in the world, 90.5 billion euro, behind major industrial powers like China, Germany, South Korea and Japan. These records are possible due to the unique characteristics of Made in Italy. A system of medium and small companies highly specialized in their core competences, which can offer on the market high-quality products, recognized through a unique brand synonymous of authenticity, history and quality. Confirming Italy's good position in international trade, in 2015, Made in Italy boasts 844 products out of 5117, which is at the top of the world's trade balance with foreign trade. This ranking, drawn up by Fondazione Symbola, Unioncamere and Fondazione Edison (2017), is based on a competitive Index of Excellence in International

Trade developed by the Fondazione Edison and includes a pattern of products classified according to HS1996. With a portfolio of 844 products, Italy appears first in 210 products (for a total value of 51 billion dollars), second in 344 products (for a total value of 68 billion dollars), and third in 290 products (for a total value of 42 billion dollars). Going through the report (Fondazione Symbola, Unioncamere, Fondazione Edison, 2017), it turns out that in the merchandise sector Italy is present in almost all the places in the commercial balance with foreign countries. Among the 210 products in which Italy holds the top position for trade surplus, leather and leather handbags are at the first place, followed by machines and equipment for packing or packing goods, shoes and glasses (second, third and fourth places respectively).

Among the products in which Italy holds the second place (344), the products related to taps and valves and that of fresh bottled grape wines have been very important. Subsequently we find the parts and accessories of tractors and vehicles for transport, followed by the furniture industry and the work in iron and steel, as well as the production of tiles and paving slabs.

Lastly, Italy is third in the world for trade surplus in jewelery, in ceramic floor and wall tiles and slabs, and in mechanical machines and equipment.

Only 126 over the 844 products are not part of the Made in Italy, while the remaining 718 are thus divided among the 4Fs of Made in Italy: Automation & Mechanics: 367 (active balance: 81 billion dollars); Fashion & Apparel: 247 (active balance: 33.4 billion dollars); Food & Beverage: 63 (active balance:19.4 billion dollars); Furniture & House 41 (current balance: 14.6 billion dollars).

3.3.2 The driving forces of the Italian manufacturing

While it is possible to state that Made in Italy is the backbone of Italian companies, a study that takes into account the geography of Italian manufacturing is essential to have a complete picture of the Italian economy. In fact, as stated by Fortis (1998), what's interesting about analyze geography of Made in Italy is the fact that it largely coincides with the geography of the wealth of our country.

To understand how Made in Italy is distributed throughout Italy, it is necessary to shift the focus on industrial districts, which, as previously stated, are one of the features of the Italian production system.

Through a study of the Report on the Economy and Finance of the Industrial Districts of Intesa SanPaolo, it is noted that in 2016 the district companies recorded a new increase in turnover, which rose by 1.8% (a study carried out at current prices). This figure officially crowns the idea that the district system of Made in Italy has led Italy out of the crisis. In fact, between 2008 and 2016, growth was 10.2% and for 2017 we expect further growth of +2.8%. Add to this the export value of the main Italian industrial districts (87.7 billion in 2016 with almost +50% compared to when the economic crisis broke out in 2009.

Through a study of the Report on the Economy and Finance of Intesa Sanpaolo Industrial Districts, it is noted that in 2016 the district companies recorded a new increase in turnover, which rose by 1.8% (a study carried out at current prices). Most of the districts showed a growth in production activity; the only exception is the fashion system, which suffered a slight reduction in sales (-0.2%), penalized by the decline in exports and the contraction in domestic consumption. The study by Intesa Sanpaolo clearly shows how the districts that have seen the best evolution are those corresponding to the Made in Italy sector. In particular, the agri-food districts that between 2008 and 2016 recorded an increase in turnover of 25.7% and those of the fashion system. In particular, the eyewear sector with a + 39%, leather goods + 31% and tanning + 28%. The Furniture & Home sector also recorded a positive result, driven by the tile sector.

From a territorial point of view, according to the study by Intesa Sanpaolo, the first three places are the Occhialeria di Belluno, the Gomma del Sebino in the Bergamo area, and the Prosecco di Conegliano-Valdobbiadine. From a more global analysis, it is noted that the districts of the North-East and North-West prevail, with 15, out of a total of 20, major Italian districts. The districts of Central Italy, pulled by the Pelletteria and footwear of Florence, and the Mezzogiorno, with the oil and pasta from Bari and the buffalo mozzarella from Campania, remain behind.

Continuing to analyze the export of Italian manufacturing, Italian exports were also driven by the push of some specific territorial areas. In fact, in 2016 the exports of the main Italian industrial districts amounted to 87.7 billion euro (Fondazione Symbola, Unioncamere, Fondazione Edison, 2017). This positive value brings the trade balance back to pre-crisis values (it was 74.8 billion euro between 2007 and 2008) after the

outbreak of the global economic crisis had drastically declined (it was 58.8 billion euro in 2009).

3.4 Why the focus on quasi-medium sized companies matters?

Usually when dealing with company growth, the common approaches try to identify the reasons for such growth, whether with a quantitative or qualitative approach. There have been many authors describing key success factor that are supposed to drive growth, such as the company vision, mission, founders background, and so on, and many others that tried to identify a relationship between the size of the business, balance sheet indicators, and the relative growth rate. But nowadays the topic has slightly shifted to a new point of view: the question today is whether growing is worthwhile, and if it is not, which are the reasons against growth (Gubitta, Tognazzo, Favaron, 2013).

Many small entrepreneurs rather than pursuing profit maximization and growth, decide to stay small. What drives them is the will of working for their interests and passions, for their wellbeing. This aspect is not usually measured by the standard performance indicators which fail in taking into account all such soft factors. One of the most common reasons for which small entities choose not to grow is the fear of leaving the so called comfort stage. Entrepreneurs are afraid that growing may involve bearing higher risk, especially concerning the capital invested (which in this case is usually consisted of family money), that they may lose control over their company, or that a forthcoming generational change may hinder their success. These are some of the personal reasons that that may push a company to decide to stay small (Traù, 2005). Additionally, there is a wide span of external factors and conditions that make company unwilling to grow: bureaucracy, tax burden, labor market, financing, and all those thresholds in laws and regulations that is more convenient not to trespass. Furthermore Costa (2012, in Gubitta, Tognazzo, Favaron, 2013) suggests that the company size has to be related to the industry in which it operates: there are some fields in which large companies are the only one able to succeed, while other where being small is a competitive advantage.

As concerns Italy, all the small enterprises have always been considered as a sort of unique characteristic, allowing to differentiate in the global market. The elasticity of such companies has also resulted in a key element to face economic crisis, even in real terms, and to best adapt to the upcoming changes. This has hold true until the 90s, but in the last 20 years smallness is not enough anymore to sustain competition (Gubitta, Tognazzo,

Favaron, 2013). Many studies show that larger companies are more productive (Onida, 2004), that the competitiveness of an economy is given mostly by the ability to grow of its businesses, and that its relative welfare is higher, the higher is its productivity level (Porter, 2000; Krugman, 1992).

3.4.1 Leverage factors to grow up

One thing that goes hand in hand with productivity is innovation. Investing in innovation, thus with high sunk costs and increasing return to scale, is an effective way to boost productivity. Hence if a company pursues innovation as its main competitive advantage, it has no other option than to grow (Grandinetti and Nasssimbeni, 2007).

Profitability taken as a proxy for company efficiency is one of the most recurring growth factor in scientific literature, but there is not a unique interpretation. In many cases there's a positive correlation between growth and profitability, while in others an opposite one is observed, and sometimes no relationship at all seems to exist.

Another driver of growth usually analyzed is the company financial structure. The simplest interpretation is that if a business is valid, and pursues good investments choices, growth is independent from its financial structure. But many scholars suggest that the higher the leverage, the lower the growth rate will be. This negative correlation is proved by Lang Ofek Stulz (1994) and by Opler and Titman (1994), who focused on this relationship during crisis time. In both cases the results were that the companies performing best were those who had a higher degrees of independence from debts.

The last growth driver discussed is R&D investments. Even though is hard to measure, innovation is considered essential in order to grow. Carayannis and Provance (2008) suggest two different kinds of performance indicators in terms of innovation:

- Output indicators: number of patents, number of new products, market penetration rate, R&D investment level. Usually short-term oriented.

- Outcome indicators: tech standards developed, disruptiveness degree. Long-term oriented.

But measuring is not the only issue related to innovation. Another one is that many small enterprises usually don't have a formal way to report innovation, but they simply innovate in their internal processes. Hence, it is difficult even to find out which company innovates and how much it does.

Thornill (2006) highlights a positive correlation between innovation and sales growth, even when differentiating across sectors with a different degree of technology. The idea that innovation boosts growth only in high tech sectors does not hold.

When comparing company growth rates in Italy to other developed countries, taking size as a differentiating variable is almost inevitable. But rather than size, what really affects competition is usually that a company business model most of the times it is not suitable to the business itself. In the global economy, those who succeed today are essentially two kinds of firms: leader firms, usually medium-large companies at the two extremes of the supply chain and specialized firms, usually medium-small companies in between the supply chain. Being a leader means adding value to the product sold, mainly through investments in R&D, while being in the middle demands investments in ancillary services to face the requests of both direct and indirect customers.

Nowadays it is not enough anymore to be the best in the production of a single product, or at least if that product it is not one of the fundamental elements of the industry business model. Companies need to grow by shaping their business model so that value adding activities and resources are coherent.

Only those firms who were participants in the international market were able to successfully face the 2008 crisis and to shift bake to their pre-crisis condition. Being international, which basically means selling in foreign markets, and not exploiting other countries cost advantages, must be the result of both and organizational and strategic growth (Gubitta, Tognazzo, Favaron, 2013).

3.5 Methodological Note

The empirical analysis of this dissertation is built on a database which comprises 1554 companies.

This database was created as an integration of the one utilized for the book *"Lepri che vincono la crisi. Storie di aziende (quasi medie) vincenti nei mercati globali"* (Gubitta, Tognazzo, Favaron, 2013). At the time, the study was focused on companies that belonged to the manufacturing Made in Italy industry that on the eve of the financial crisis that broke out in September 2008 were defined as quasi-medium-sized, whose revenues, in 2007, fell within the 10 – 12,9 million Euros range. Gubitta, Tognazzo and Favaron's aim was to understand what kind of business determinants, that were a reality just before the financial crisis hit, allowed some quasi-medium companies to be able to perform

better than the overall market in the following three-year period (2008-2010), measured in term of growth (revenues) and performance (profitability).

Data were retrieved from the database AIDA of Bureau van Dijk, which is widely used to retrieve comprehensive financial, legal and commercial information on Italian companies.

Moreover, these companies were categorized as part of the manufacturing Made in Italy industry, which is divided in four parts: Fashion & Apparel, Food & Beverage, Furniture & Home Appliances, Automation & Mechanics. The choice fell on companies active in the Made in Italy industry, because of the crucial role the industry has been playing globally, which secured our country a great success and competitiveness around the world. To isolate Made in Italy companies, the ATECO codification was utilized.

Concerning the geographical location of the companies, the Italian territory was divided into four main areas: North-West, North-East, Center and South and Islands. The North-West includes Valle d'Aosta, Piemonte, Liguria and Lombardia; the North-East includes Trentino-Alto Adige, Veneto and Friuli-Venezia Giulia; Central Italy comprehends Emilia-Romagna, Tuscany, Marche, Umbria and Lazio; the macro-area South and Islands comprises Abruzzo, Apulia, Molise, Campania, Basilicata, Calabria, Sicily and Sardinia. In general, when a rate of change was calculated, the inflation rate was not taken into consideration. Moreover, being the database subject of this dissertation built on a previously created one, the same interpretation of medium-sized firms was taken into account, which considers the minimum limit of revenues to be comprehended in this category equal to 13 million Euros.

The analysis subject of this dissertation is set as a longitudinal study that covers years from 2004 to 2017. For this reason, the most recent financial and governance data were incorporated in the original database.

3.6 The longitudinal analysis

The database subject of study of this dissertation was built by integrating a previously developed one that was the groundwork for Gubitta, Tognazzo and Favaron's analysis (2013).

It is interesting to look at the difference of numbers in the ten-year period, comparing how many companies were present at the starting point of the analysis in 2007 and at the end of 2017.

When looking at the numbers divided by geographical macro-area (Table1), it is noticeable that in the North-East of Italy the biggest decrease of active companies is registered, equal to -26%. In the North-West and Center of the country, the variation is equal to -23,1% and -24,7% respectively, whereas in the South and Islands it was equal to -21%, which is the lowest reduction among the four areas. Moreover, it can be highlighted that the majority of the sample's companies are still located in north-western Italy and the smallest portion of firms is in the South and the Islands. Of the 1554 active companies of the 2007, 7% was involved in a merger operation and 17% is either dissolved or underwent some kind of legal procedure.

Table 2: Made in Italy after ten years: quasi-medium firms by macro-area

MACRO-AREA OF MADE IN ITALY		2007		2017		2007-2017 VARIATION	
		A.V.	%	A.V.	%	A.V.	%
Active	North-East	331	21,3%	245	15,8%	-86	-26,0%
	North-West	620	39,9%	477	30,7%	-143	-23,1%
	Center	465	29,9%	350	22,5%	-115	-24,7%
	South - Islands	138	8,9%	109	7,0%	-29	-21,0%
Total Active		1554	100%	1181	76,0%	-373	-24,0%
Merged		-	-	109	7,0%	-	-
Dissolved or In Procedure		-	-	264	17,0%	-	-
Total		1554	-	1554	100,0%	-	-

Source: Author's elaboration

With regards to the macro-industry classification of the sample's companies (Table 2), among the four categories, it was Fashion & Apparel that registered the highest decrease from 2007 to 2017, equal to -31,1%. The reduction was slightly less for Furniture & Home Appliances (-30,5%) whereas Food & Beverages and Automation & Mechanics' decrease was less than one fourth compared to 2007. To highlight is the fact that of the initial sample composed of 1554 companies, there are some that changed their ATECO code into service activities. Of these portion of firms, 29 are still active in 2017. Looking at the subdivision of the companies among the macro-industries, Automation & Mechanics is the one with the highest number of quasi-medium sized companies, both in 2007 and in 2017.

Table 3: Made in Italy after ten years: quasi-medium firms by macro-industry

MACRO-INDUSTRY OF MADE IN ITALY		2007		2017		2007-2017 VARIATION	
		A.V.	%	A.V.	%	A.V.	%
Active	Fashion & Apparel	338	21,8%	233	15,0%	-105	-31,1%
	Food & Beverages	202	13,0%	157	10,1%	-45	-22,3%
	Furniture & Home Appliances	203	13,1%	141	9,1%	-62	-30,5%
	Automation & Mechanics	811	52,2%	621	40,0%	-190	-23,4%
	Services Industry	n.d.a.	n.d.a.	29	1,9%	-	-
Total Active		1554	100%	1181	76,0%	-373	-24,0%
Merged		-	-	109	7,0%	-	-
Dissolved or In Procedure		-	-	264	17,0%	-	-
Total		1554	-	1554	100,0%	-	-

Source: Author's elaboration

3.6.1 General analysis by legal status

Analyzing the sample of companies based on their actual legal status, it is possible to see (Table 3) that not all of them are still working today. Of the 1554 companies that compose the sample, 1181 (76%) are still active in the market. In the period 2007-2017, the 7,7% of the sample went bankrupt, whereas the remaining 9,3% underwent some kind of legal procedure. To be highlighted are the 109 companies (7%) that merged with other companies, which are considered to be still active today, despite operating under a different name or administration, and the 3,9% of companies that are still active but, to some extent, insolvent.

Table 4: Legal status of the sample's companies

LEGAL STATUS	PERCENTAGE VALUES
Active	76,0%

Merged	7,0%
Bankrupt	7,7%
Legal Proceeding	9,3%
Active (Default of payment)	*3,9%*
Dissolved (Demerger)	*0,1%*
Dissolved (In liquidation)	*1,4%*
Dissolved	*1,0%*
In liquidation	*2,9%*
TOTAL	100,0%

Source: Author's elaboration

In general, it can be noticed (Table 4) that almost the 40% (620) of the companies of the sample are located in north-western Italy, 21,2% (329) in the North-East, 30,1% (467) in the central area of the country and the remaining 8,9% (138) are located in the South and in the islands.

With a cross-analysis between legal status and territorial position of the companies, it is possible to notice that active companies amount over three fourth of the total in the North-West and in the South and in the islands, whereas in the North-East and Center the active portion is slightly under 75%.

The North-West has registered the lowest level of bankruptcy (5,8%), whereas the highest level (10,9%) was registered in the South and in the islands. North-West and North-East show the highest percentage values of merger operations, 8,5% and 8,8% respectively.

Central Italy has registered the highest percentage of insolvent companies that are still active, 5,8% and 3,9% of the companies are in liquidation. Of the total 138 companies located in the South of Italy and the Islands, 10,9% went bankrupt and 5,1% merged with another company.

Table 5: Legal status of quasi-medium firms in 2017 by macro-area

			MACRO-AREA			
LEGAL STATUS	A.V.	%	NORTH-WEST	NORTH-EAST	CENTER	SOUTH-ISLANDS

Active	1181	76,0%	76,9%	74,5%	74,9%	79,0%
Merged	109	7,01%	8,5%	8,8%	4,3%	5,1%
Bankrupt	119	7,66%	5,8%	8,2%	8,8%	10,9%
Legal Proceeding	145	9,33%	8,7%	8,5%	12,0%	5,1%
Active (Default of payment)	*61*	*3,93%*	*3,9%*	*2,4%*	*5,8%*	*1,4%*
Dissolved (Demerger)	*2*	*0,13%*	*0,0%*	*0,3%*	*0,2%*	*0,0%*
Dissolved (In liquidation)	*22*	*1,42%*	*1,0%*	*2,4%*	*1,5%*	*0,7%*
Dissolved	*15*	*0,97%*	*1,8%*	*0,3%*	*0,6%*	*0,0%*
In liquidation	*45*	*2,90%*	*2,1%*	*3,0%*	*3,9%*	*2,9%*
TOTAL	1554	100%	100%	100%	100%	100%
% ON TOTAL 1554 COMPANIES			39,9%	21,2%	30,1%	8,9%

Source: Author's elaboration

Looking now at the fragmentation of the companies at the end of 2017, based on their legal status and the Made in Italy industry they belong to (Table 5), the sample taken into consideration has been decreased of the companies that are today working in the service industry, following an ATECO code change between 2010 and 2017, which will be shown later on. Therefore, the quasi-medium companies of the sample that today still operate in a Made in Italy industry amount to 1513 units.

Food & Beverages is the industry with the lowest total number of quasi-medium-sized companies of the sample, equal to 194 (12,8%), whereas Fashion & Apparel counts 329 (21,7%) companies, Furniture & Home Appliances companies are 200 (13,2%) and, lastly in the Automation & Mechanics industry the highest number is recorded, equal to 790 companies (52,2%).

As far as the Food & Beverages industry is concerned, it can be affirmed that just a bit more than four fifth (80,9%) of the total 194 companies are active, 6,7% went bankrupt and 7,7% were subject of a merger operation.

The Furniture & Home Appliances industry has registered the highest level of bankrupt companies (12%) in comparison with the other three industries and 7% of the 200 companies of this sector have registered default of payment.

With regards to the Fashion & Apparel industry, 14,9% of the total 329 have been undergoing some kind of legal proceeding: in particular, 5,8% are insolvent and 4,6% are now being subjected to a liquidation process. Moreover, 9,1% of these companies went bankrupt and 5,2% merged with another one.

The Automation & Mechanics industry, lastly, registered 78,6% of active entities, 6,3% of bankruptcy among its companies, 6,8% was subject of a legal proceeding and the remaining 8,2% of firms were involved in a merger.

Table 6: Legal status of quasi-medium firms in 2017 by macro-industry

			MACRO-INDUSTRY			
LEGAL STATUS	A.V.	%	FASHION & APPAREL	FOOD & BEVERAGES	FURNITURE & HOME APPLIANCES	AUTOMATION & MECHANICS
Active	1152	76,14%	70,8%	80,9%	70,5%	78,6%
Merged	107	7,07%	5,2%	7,7%	5,0%	8,2%
Bankrupt	117	7,73%	9,1%	6,7%	12,0%	6,3%
Legal Proceeding	137	9,05%	14,9%	4,6%	12,5%	6,8%
Active (Default of payment)	56	3,70%	5,8%	0,5%	7,0%	2,8%
Dissolved (Demerger)	1	0,07%	0,0%	0,5%	0,0%	0,0%
Dissolved (In liquidation)	22	1,45%	3,3%	0,0%	2,0%	0,9%
Dissolved	14	0,93%	1,2%	1,0%	0,0%	1,0%
In liquidation	44	2,91%	4,6%	2,6%	3,5%	2,2%
TOTAL	1513	100%	100%	100%	100%	100%
% ON TOTAL 1513 COMPANIES			21,7%	12,8%	13,2%	52,2%

Source: Author's elaboration

With regards to the ATECO code of the companies (Table 6), it is possible to observe that, of the total 1554 companies, 16,2% (251) have changed the ATECO classification of belonging, of which 2,5% (41) to an ATECO code that relates to service activities. The majority of this 16,2% is still active in the Made in Italy industry (13,5%), 0,6% was subject of a merger operation, 1,2% underwent some kind of legal proceeding, and the remaining 0,9% went bankrupt.

The types of service which some companies switched their activity to predominantly refer to advisory and management activities for companies.

Table 7: Legal status of quasi-medium firms in 2017 that changed ATECO code

| LEGAL STATUS | ATECO | | | | | |
| | NO CHANGE | | CHANGE | | OF WHICH TO SERVICE TO ENTERPRISE | |
	A.V.	%	A.V.	%	A.V.	%
Active	971	62,5%	210	13,5%	29	1,9%
Merged	100	6,4%	9	0,6%	2	0,1%
Bankrupt	105	6,8%	14	0,9%	2	0,1%
Legal Proceeding	127	8,2%	18	1,2%	8	0,5%
Active (Default of payment)	52	3,3%	9	0,6%	5	0,3%
Dissolved (Demerger)	1	0,1%	1	0,1%	1	0,1%
Dissolved (In liquidation)	21	1,4%	1	0,1%	0	0,0%
Dissolved	12	0,8%	3	0,2%	1	0,1%
In liquidation	41	2,6%	4	0,3%	1	0,1%
% ON 1554 TOTAL COMPANIES	1303	83,8%	251	16,2%	41	2,5%

Source: Author's elaboration

3.6.2 Cross-analysis between macro-industry and macro-area

When crossing data between macro-industry and macro-area (Table 7), quasi-medium firms operating in the Automation & Mechanics industry account for the biggest portion of firms in each macro-area: in North-East it's the 51,3% of firms, in the North-West the 60,1%, in Central Italy 45,6% and in Southern Italy and in the Islands it's the 40,9% of firms that operate in this Made in Italy industry. Furniture & Home Appliances companies in the North-East are almost equal to the 21%, whereas in the South and in the islands, it is only the 8%. With regards to the Food & Beverages companies, those amount to the 40,1% in the South and in the islands, while in central Italy the percentage is slightly less than 10%. The Fashion & Apparel industry is mostly present in central regions of the country: in fact, 29,5% of all the companies of this macro-area operate in the industry.

Table 8: Quasi-medium firms in 2017 by macro-industry and macro-area

MACRO-INDUSTRY 2017	A.V.	%	MACRO-AREA

			NORTH-EAST	NORTH-WEST	CENTER	SOUTH-ISLANDS
Fashion & Apparel	329	21,7%	17,8%	20,5%	29,5%	10,9%
Food & Beverages	194	12,8%	10,0%	10,3%	9,8%	40,1%
Furniture & Home Appliances	200	13,2%	20,9%	9,0%	15,0%	8,0%
Automation & Mechanics	790	52,2%	51,3%	60,1%	45,6%	40,9%
TOTAL	1513	100%	100%	100%	100%	100%

Source: Author's elaboration

3.6.3 Classification by revenues stream

Considering all Made in Italy companies, it can be noticed that (Table 8), in the period 2007-2017, 29,9% (452) of the firms registered revenues over 13 million Euros, 13,7% (208) remained in the segment with revenues between 10 and 12,99 million Euros, 21,4% (324) saw their revenues going down to the 5 - 9,99 million segment and finally the ones that downgraded to the under 5 million segment equal to 7% (106).

Analyzing now the breakdown of the companies based on their revenues stream and the macro-industry they belong to, it is possible to notice that the majority of firms in the Food & Beverages industry surpassed the threshold of 13 million Euros of revenues between 2007 and 2017. However, a consistent portion of companies of this industry, equal to 18,6%, relates to firms in liquidation, dissolved or merged. In addition, the firms whose revenues decreased and went under 9,99 million Euros amount to 13,4%, whereas in the other three industries the portion of companies that registered decreased revenues under the 9,99 million Euros threshold are equal to 30% circa.

In the Fashion & Apparel industry, almost one fourth of the companies registered revenues over 13 million Euros, in the Furniture & Home Appliances industry they are equal to 20% and in Automation & Mechanics they are just above 30%.

In every Made in Italy industry, the percentage of companies whose revenues remained in the 10-12,99 million Euros segment ranges from 12,5% to 14,6%.

Table 9: Made in Italy after 10 years: revenues changes of quasi-medium firms by macro-industry

	A.V.	%	MACRO-INDUSTRY

Revenues movements between 2007 and 2017			Fashion & Apparel	Food & Beverages	Furniture & Home Appliances	Automation & Mechanics
Revenues went over 13 mil.	452	29,9%	24,6%	45,9%	20,0%	30,6%
Revenues stayed between 10 - 12,99 mil.	208	13,7%	12,5%	13,4%	13,0%	14,6%
Revenues went down, between 5-9,99 mil.	324	21,4%	21,6%	11,3%	20,5%	24,1%
Revenues went under 5 mil.	106	7,0%	10,3%	2,1%	10,0%	6,1%
Firms in liquidation, dissolved or merged	324	21,4%	25,2%	18,6%	25,0%	19,6%
N.D.A:	99	6,5%	5,8%	8,8%	11,5%	5,1%
Total	1513	100%	100%	100%	100%	100%

Source: Author's elaboration

With regards to the geographical division based on revenues stream (Table 9), northern Italy registered just over 30% of companies which surpassed the threshold of 13 million Euros of revenues, whereas in the Center the percentage is equal to 29,1% and in the South and in the island amounts to 27,7%. Again, both northern sides have 15% of companies whose revenues remained in the 10 – 12,99 million Euros segment, while the percentage is lower in central Italy and in the South and in the islands, equaling to 12,8% and 8% respectively.

Over one fifth of companies in the North-East, North-West and Center registered decreasing revenues to the 5 – 9,99 million Euros segment, and in southern Italy and in the islands the percentage of companies belonging to this segment equals to 16,1%.

Companies that registered revenues under 5 million Euros are a minimal portion in the North-East (3,8%). In the North-West they are the 6,6% and in the rest of the country they are just a little less than 10%.

Table 10: Made in Italy after 10 years: revenues changes of quasi-medium firms by macro-area

Revenues movements	A.V.	%	Macro-Area

BETWEEN 2007 AND 2017			NORTH-EAST	NORTH-WEST	CENTER	SOUTH-ISLANDS
Revenues went over 13 mil.	452	29,9%	30,9%	30,4%	29,1%	27,7%
Revenues stayed between 10 - 12,99 mil.	208	13,7%	15,0%	15,1%	12,8%	8,0%
Revenues went down, between 5-9,99 mil.	324	21,4%	21,6%	22,5%	21,5%	16,1%
Revenues went under 5 mil.	106	7,0%	3,8%	6,6%	9,2%	9,5%
Firms in liquidation, dissolved or merged	324	21,4%	24,4%	21,0%	20,1%	20,4%
N.D.A:	99	6,5%	4,4%	4,4%	7,4%	18,2%
TOTAL	1513	100%	100%	100%	100%	100%

Source: Author's elaboration

3.7 Conclusion

In this chapter we made a trip into Made in Italy and we saw how it is the backbone of the Italian manufacturing system. The Italian companies have taken Italy out of the crisis almost by taken the country by its hand, continuing to hire talents and to sustain sales even when all the other sectors were falling. The authenticity, innovation and quality of Made in Italy continues to be recognized worldwide and this translates into an increase in exports and an active trade balance with foreign countries.

It has also been analyzed how many companies prefer to remain small because this allows them to have better results. Despite this, companies that are able to leverage some factors in order to grow are able to become hares and run towards greater prosperity.

Putting together the Made in Italy and the growth, we proceeded to carry out a longitudinal analysis on a sample of 1554 quasi-medium-sized companies. It was therefore possible to see how the Made in Italy companies have been resilient: 76% of the companies present in 2007 are still active in the market and only 7.7 and went bankrupt. From the initial sample, 30% of these, despite the crisis, have been able to overcome the crisis and run more than 13 million euros in turnover.

WHICH FACTORS INFLUENCE THE RESILIENCE OF THE QUASI-MEDIUM FIRMS OF MADE IN ITALY?

4.1 Introduction

In the previous chapters the topic of resilience was addressed with a particular focus on organizations. It has therefore been deduced that organizational resilience is the ability of a company to resist a shock by leveraging some drivers that may be strategic or corporate governance. In Chapter 3, instead, starting from an in-depth study on the Made in Italy and the quasi-medium-sized Italian firms, a longitudinal study was carried out on 1554 companies that, at the beginning of the 2007 economic crisis, had a turnover between 10 and 12.99 million euro and were part of one of the 4 Made in Italy industries: Fashion & Apparel, Automation & Mechanics, Furniture & Home Appliances, and Food & Beverages.

In this chapter we will try to combine the previously carried out studies and understand which drivers have allowed the sample companies to survive and to have greater performance. To this end we started from two hypotheses that suggested us to formulate as many research questions.

The first hypothesis is based on the fact that, in periods of difficulty, the proprietary concentration allows to make quick decisions, and, therefore, respond more efficiently to the shocks. To better understand the attributes related to the resilience's drivers we have also added another variable: the capitalization. So our second hypothesis is based on the fact that, in a period of crisis, management that supply the company with new assets have an advantage because they communicate to the outside world that they believe in the

business and they have a plan for the future. Taking into consideration what has been said, the first research question is:

> Does the concentration of the Share Capital influence the companies' capacity of survival? And is Equity a good predictor for resilience?

To understand how far a concentration of Share Capital can influence an organization, it was also decided to consider the performance indexes of the companies. If our first hypothesis is true, it is fair to think that high level of proprietary concentration leads to better performance. Therefore, the second research question is:

> Does the Gini Concentration Index affect performance?

To answer these questions, we carried out analyses using two different regression models and, in order to fully understand them, in Paragraph 4.2 we will provide all the necessary information about the sample of companies and the variables used in our research. In Paragraph 4.3 will be explained how the regression models are built and the results will be discussed briefly. More detailed explanations with the relative discussion will, instead, be given in the paragraph related to managerial implications (4.5).

4.2 Methodological note

As mentioned in the Paragraph 4.1, the objective of this study is to understand how the concentration of social capital has influenced the resistance of organizations given the shock of the 2007 crisis and its performance. In addition, we want to understand if Equity is a good predictor for companies' resilience.

4.2.1 Sample development

For this purpose, it was decided to integrate the database used in the book *"Lepri che vincono la crisi. Storie di aziende (quasi medie) vincenti nei mercati globali"* (Gubitta, Tognazzo, Favaron, 2013). At the time, the study was focused on companies that belonged to the manufacturing Made in Italy industry that on the eve of the financial crisis that broke out in September 2008 were defined as quasi-medium-sized, whose revenues, in 2007, fell within the 10 − 12,9 million Euros range. Data were retrieved from the database AIDA of Bureau van Dijk, which is widely used to retrieve comprehensive financial, legal and commercial information on Italian companies. The latest data update was made in November 2018 to also include data for 2017. These companies are

categorized as part of the manufacturing Made in Italy industry, which is divided in four parts: Fashion and Apparel, Food and Beverage, Furniture and Home Appliances, Automation and Mechanics. Concerning the geographical location of the companies, the Italian territory was divided into four main areas: North-West, North-East, Center and South and Islands. The North-West includes Valle d'Aosta, Piemonte, Liguria and Lombardia; the North-East includes Trentino-Alto Adige, Veneto and Friuli-Venezia Giulia; Central Italy comprehends Emilia-Romagna, Tuscany, Marche, Umbria and Lazio; the macro-area South and Islands comprises Abruzzo, Apulia, Molise, Campania, Basilicata, Calabria, Sicily and Sardinia.

The database thus built consists of 1554 companies with data ranging from 2007 to 2017 and in the following tables a breakdown by geographical area, sector and revenues stream is proposed:

Table 11: Breakdown by geographical area

MACRO-AREA	ABSOLUTE VALUE
North-East	329
North-West	620
Cente	467
South-Islands	138
TOTAL SAMPLE	1554

Source: Author's elaboration

Table 12: Breakdown by macro-industry

MACRO-INDUSTRY	ABSOLUTE VALUE.
Fashion&Apparel	329
Food&Beverage	194
Furnture&Home Appliances	200
Automation&Mechanics	790
TOTAL SAMPLE	1513

Source: Author's elaboration

Table 13: Breakdown by revenues stream

REVENUES STREAM	ABSOLUTE VALUE

Revenues over 13 mil.	453
Revenues between 10-12,99 mil.	209
Revenues beween 5-9,99 mil.	326
Revenues under 5 mil.	129
Firms in liquidation, dissolved or merged	333
N.D.A	104
TOTAL	1554

Source: Author's elaboration

4.2.2 Index development

To answer the research questions posed in the previous chapters, it was decided to use five different types of measures:

- ROE: The Return on Equity measures the profitability of a business in relation to the equity. It is calculated as: $\text{ROE} = \frac{\text{Net Income}}{\text{Equity}}$.

- ROA: The Return on Assets measures how profitable a company is in relation to its total assets. It is calculated as: $\text{ROA} = \frac{\text{Net Income}}{\text{Total Assets}}$.

- Equity: Amount of the funds contributed by the owners (or shareholder) plus the retained earnings (or losses). It is calculated as: $\text{Equity} = \text{Assets} - \text{Liabilities}$.

All three measures were taken from the AIDA database for the years related from 2007 to 2017. The ROE and ROA indexes are expressed as a percentage, while Equity is expressed in thousands of euro.

In order to evaluate the trend, it has been decided to calculate the percentage variation described as follows: $\Delta_x = \frac{(X_{2017} - X_{2007})}{X_{2007}}$.

As concern for the fifth one, Gini Concentration Index, the subject is different and deserves further study. In statistics, the Gini concentration index, also known as concentration ratio, is the most common tool for measuring concentration in the distribution of a positive random variable (Giorgi, 2016). The Gini index is of fundamental importance for the study of the inequality of income and wealth but has also taken on particular importance in the company disciplines. In fact, it is often used to calculate the risk level of one's business.

The Gini coefficient is defined as: $R_G = \frac{\sum_{i=1}^{n-1}(Pi-Qi)}{\sum_{i=1}^{n-1}Pi}$, where Qi is the cumulated percentage of T and Pi is the cumulated percentage T in the case of perfect equality. The Gini index varies between *0* and *1*, where *0* stands for *perfect equality*, and *1* stands for *perfect inequality*.

Given that for the reference sample of this study it was not possible to manually calculate the Gini index for each company and since Microsoft Office Excel does not provide a function to calculate this index, a VBA – Visual Basic for Application function was adopted (De Meo, 2007). The calculation of the Gini Index is based on the only available data related to the 2017.

Another index was then subsequently calculated. Through the information regarding the Legal Status of each company, a binary index has been constructed, where the value 1 belongs to active companies (1181), merged companies (109) and companies in a state of insolvency (61). The reason to include also the last two categories of companies is due to the fact that they are, for some extent, still active even if sometimes under other identities. The remaining companies (203) have been assigned the value of 0.

For a more complete analysis, macro-sectors and geographical macro-areas were also taken into consideration. In our model they will be studied as dummies and therefore as interactions with the independent variables.

Below a descriptive statistic of the sample.

Table 14: Descriptive statistics of the sample

INDEX	OBSERVATION	AVERAGE	MEDIAN	ST.DEV
ROE$_{2007-2017}$	1152	0,939	-0,485	13,414
ROA$_{2007-2017}$	1267	-1,062	-0,491	17,007
Equity$_{2007-2017}$	1268	0,146	0,732	9,852
Gini Index$_{2017}$	1401	0,542	0,500	0,366

Source: Author's elaboration

4.3 Building up the regression models

For the purpose of this study, we have tried to analyze whether the concentration of share capital in the hands of one or a few owners has influenced the survival capacity of the companies of the sample, and whether Equity was a good predictor of resilience. Also,

taking into account the Gini index we wanted to understand the impact of the same on the performance. To do this, two different regression models were used.

For the first objective of the study it was considered appropriate to use *logistic regression*. Logistic regression is a special case of regression with the function of linking a logit function. It is used in cases where the dependent variable *Y* is of dichotomous type, and referable to 1 or 0 and to no other value included or outside this range. The general model is described by:

$$logit(p) = \beta_0 + \beta_1 x_1 + \beta_2 x_{2+} \beta_3 x_3 + \cdots + \beta_k x_k = X\beta, \quad \text{where} \quad logit(p) = In\left(\frac{p}{1-p}\right)$$

with *p* the probability that the events y occurs.

Wanting to understand if the Gini concentration index and certain levels of Equity have influenced the ability to survive the crisis and on which extent the interaction with the dummy variables influenced our hypothesis, our model is built as follows:

- $legal_{status} = \beta_0 + \beta_1 Gini + D_1 FashionApparel + D_2 Food\&Beverage + D_3 FurnitureHomeAppliances + D_4 AutomationMechanics + \beta_2 * Gini * FashionApparel + \beta_3 Gini * FoodBeverage + \beta_4 Gini * FurnitureHomeAppaliances + \beta_5 Gini * AutomationMechanics$

- $legal_{status} = \beta_0 + \beta_1 Gini + D_1 NorthEast + D_2 NorthWest + D_3 Center + D_4 South + \beta_2 Gini * NorthEast + \beta_3 Gini * NorthWest + \beta_4 Gini * Center + \beta_5 Gini * SouthIslands$

- $legal_{status} = \beta_0 + \beta_1 \Delta Equity + D_1 FashionApparel + D_2 FoodBeverage + D_3 FurnitureHomeAppliances + D_4 AutomationMechanics + \beta_2 * \Delta Equity * FashionApparel + \beta_3 \Delta Equity * FoodBeverage + \beta_4 \Delta Equity * FurnitureHomeAppliances + \beta_5 \Delta Equity * AutomationMechanics$

- $legal_{status} = \beta_0 + \beta_1 \Delta Equity + D_1 NorthEast + D_2 NorthWest + D_3 Center + D_4 SouthIslands + \beta_2 * \Delta Equity * NorthEast + \beta_3 \Delta Equity * NorthWest + \beta_4 \Delta Equity * Center + \beta_5 \Delta Equity * SouthIslands$

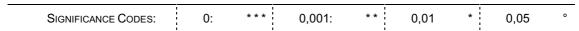where β_0 represents the value of the intercept and the elements from β_1 to β_5 are the coefficients for each independent variable. The variables from D_1 to D_4 are, instead, the dummies variable used as interaction with the independent variables.

For the second objective of the study it was considered appropriate to use the multiple linear regression model. The general model is described by:

$y_i = \beta_0 + \beta_1 x_1 + \beta_2 x_{2+} \beta_3 x_3 + \cdots + \beta_k x_k + \varepsilon_i = X\beta$ where y_i is the outcome we want to predict, β_0 represents the value of the intercept and the elements from β_1 to β_9 are the coefficients for each independent and dummy variables. The ε_i the residual error. The estimated models are then:

- $\widehat{ROE} = \beta_0 + \beta_1 \text{Gini} + D_1 \text{FashionApparel} + D_2 \text{FoodBeverage} + D_3 \text{FurnitureHomeAppliances} + D_4 \text{AutomationMechanics} + D_1 * \text{Gini} * \text{FashionApparel} + D_2 * \text{Gini} * \text{Food\&Beverage} + D_3 * \text{Gini} * \text{Furniture\&HomeAppliances} + D_4 * \text{Gini} * \text{Automation\&Mechanics}$

- $\widehat{ROE} = \beta_0 + \beta_1 \text{Gini} + D_1 \text{NorthEast} + D_2 \text{NorthWest} + D_3 \text{Center} + D_4 \text{SouthIslands} + D_1 * \text{Gini} * \text{NorthEast} + D_2 * \text{Gini} * \text{NorthWest} + D_3 * \text{Gini} * \text{Center} + D_4 * \text{Gini} * \text{SouthIslands}$

- $\widehat{ROA} = \beta_0 + \beta_1 \text{Gini} + D_1 \text{FashionApparel} + D_2 \text{FoodBeverage} + D_3 \text{FurnitureHomeAppliances} + D_4 \text{AutomationMechanics} + D_1 * \text{Gini} * \text{FashionApparel} + D_2 * \text{Gini} * \text{Food\&Beverage} + D_3 * \text{Gini} * \text{Furniture\&HomeAppliances} + D_4 * \text{Gini} * \text{Automation\&Mechanics}$

- $\widehat{ROA} = \beta_0 + \beta_1 \text{Gini} + D_1 \text{NorthEast} + D_2 \text{NorthWest} + D_3 \text{Center} + D_4 \text{SouthIslands} + D_1 * \text{Gini} * \text{NorthEast} + D_2 * \text{Gini} * \text{NorthWest} + D_3 * \text{Gini} * \text{Center} + D_4 * \text{Gini} * \text{SouthIsland}$

In the regression models of Paragraph 4.4 we will refer to the following significance codes:

SIGNIFICANCE CODES:	0:	***	0,001:	**	0,01	*	0,05	°

Source: Adaptation from R - Statistics

4.4 Main Findings

With the models described in Paragraph 4.3, the regressions were performed. For each table presented below, the results will be briefly described and reference should be made to Paragraph 4.4 for a broader comment and the managerial implications.

Does the concentration of the share capital influence the survival capacity of companies? And Equity is a good predictor for resilience?

Table 15: Logistic Regression -> Legal Status = Gini + interactions with macro-industry

		LEGAL STATUS			
		Variable	Coef.	Pr(>|z|)	Sign.
AIC	1206,9	(intercept)	1,47040	0,0171	*
Min	-2,40710	Gini	1,36998	0,3009	
1Q	0,46480	Fashion&Apparel	0,01097	0,9868	
Median	0,47170	Automation&Mechanics	0,70706	0,2751	
3Q	0,61820	Furniture&HomeAppliances	0,06810	0,9206	
Max	0,64320	Food&Beverage	0,60198	0,4001	
Res. Dev.	1.204,60	Gini:Fashion&Apparel	1,33465	0,3329	
		Gini:Automation&Mechanic	-1,41173	0,2992	
		Gini:Furniture&HomeApp.	-1,34522	0,3384	
		Gini:Food&Beverage	-1,29519	0,3705	

Source: Author's elaboration

Table 16: Logistic Regression -> Legal Status = Gini + interactions with macro-area

		LEGAL STATUS			
AIC	988,7	Variable	Coef.	Pr(>|z|)	Sign.
Min	-2,22410	(intercept)	1,71113	1,4E-08	***
1Q	0,46850	Gini	0,02158	0,9600	
Median	0,48110	North-East	0,52848	0,3030	
3Q	0,57180	North-West	0,47337	0,2880	
Max	0,78	Center	0,02158	0,7320	
Res. Dev.	972,20	South&Islands	-0,06675	0,2410	
		Gini:North-East	-0,6291	0,3770	
		Gini:North-West	-0,10813	0,8610	
		Gini:Center	1,31999	0,7436	
		Gini:South&Islands	0,36430	0,1580	

Source: Author's elaboration

Table 15 and Table 16 show the analysis of the logistic regression where the Legal Status (taken 1 = Active as reference) is the dependent variable and the Gini index the independent one. As can be seen from the data there is no significance between the two variables and therefore we can state that a greater level of concentration of social capital does not correspond to a greater probability of survival to the crisis.

Table 17: Logistic Regression -> Legal Status + Δ Equity and interactions with macro-industry

		LEGAL STATUS			
AIC	358,6	Variable	Coef.	Pr(>|z|)	Sign.
Min	-3,04180	(intercept)	3,91200	0,00647	* *
1Q	0,18380	Equity	0,99480	0,0422	*
Median	0,22410	Fashion&Apparel	-1,12010	0,4437	
3Q	0,26050	Automation&Mechanics	-0,35430	0,8084	

Max	4,20680	Furniture&HomeAppliances	-0,48970	0,7459	
Res. Dev.	338,64	Food&Beverage	-0,24180	0,8739	
		Equity:Fashion&Apparel	0,9153	0,0348	*
		Equity:Automation&Mech.	0,99280	0,0428	*
		Equity:Furniture&HomeAp.	0,90160	0,0811	°
		Equity:Food&Beverage	-0,59380	0,3705	

Source: Author's elaboration

Table 18: Logistic Regression -> Legal Status + Δ Equity and interactions with macro-area

<div align="center">LEGAL STATUS</div>

AIC	358,8	Variable	Coef.	Pr(>|z|)	Sign.
Min	-3,41490	(intercept)	2,81346	0,00026	***
1Q	0,20900	Equity	0,13127	0,0052	* *
Median	0,23540	North-East	0,70730	0,2907	
3Q	0,27400	North-West	0,75286	0,2915	
Max	1,28270	Center	0,43651	0,1814	
Res. Dev.	342,75	South&Islands	0,23872	0,1101	
		Equity:North-East	0,28063	0,0763	°
		Equity:North-West	0,12396	0,0094	* *
		Equity:Center	1,31999	0,1102	
		Equity:South&Islands	1,41697	0,1580	

Source: Author's elaboration

Table 17 and Table 18 show the analysis of the logistic regression where the Legal Status (taken 1 = Active as reference) is the dependent variable and the Equity growth variation is the independent variable. As can be seen from the data there is significance between the two variables and therefore we can state that the higher is the level of increase in Equity, the higher is the probability of survival to the crisis. This is true both with the interaction with the macro-industry and to the macro-area. In particular, there is a slight positive correlation in the interaction between an increase in Equity and the Fashion & Apparel and Automation & Mechanics industry. The Furniture & Home Appliances industry has a very slight significance but the Food & Beverage industry show no correlation at all. As for the geographical area, an increase in Equity has increased the chance of survival especially in the North of Italy. In particular the North-West has a good correlation, while the North-East a slight significance. The other geographical areas do not show particular significance.

Does the Gini concentration index affect performance?

Table 19: Multiple Linear Regression -> ROE = Gini + interactions with macro-industry

<div align="center">ROE</div>

R^2	0,005746	Variables	Coef.	Pr(>|t|)	Sign
Min	-49,663	(intercept)	2,467	0,742	
1Q	-1,879	Gini	-6,748	0,495	
Median	-1,285	Fashion&Apparel	-2,859	0,711	
3Q	-0,131	Automation&Mech.	-1,666	0,826	
Max	201,220	Furniture&HomeAp.	-4,107	0,599	
Res. St. Er.	11,5 (932)	Food&Beverage	-0,483	0,951	
F-statistic	0,5985	Gini:Fashion&Appar.	8,052	0,43	
p-value	0,799	Gini:Automation&M.	6,884	0,491	
		Gini:Furniture&HApp.	9,407	0,364	
		Gini:Food&Beverage	7,362	0,479	

Source: Author's elaboration

Table 20: Multiple Linear Regression -> ROE = Gini + interactions with macro-area

ROE

R^2	0,004648	Variables	Coef.	Pr(>|t|)	Sign.
Min	-50,967	(intercept)	0,219	0,932	
1Q	-2,166	Gini	1,453	0,7	
Median	-1,166	North-East	0,187	0,952	
3Q	-0,020	North-West	0,619	0,823	
Max	200,384	Center	-0,258	0,93	
Res. St. Er.	11,49 (934)	South&Islands	-0,214	0,241	
F-statistic	0,6231	Gini:North-Eeast	-0,722	0,875	
p-value	0,7371	Gini:North-West	-0,452	0,914	
		Gini:Center	-1,754	0,683	
		Gini:South&Islands	-1,459	0,539	

Source: Author's elaboration

Table 19 and Table 20 show the analysis of the multiple linear regression where the ROE is the dependent variable and the Gini index the independent one. As can be seen from the data there is no significance between the two variables and since the p-value is greater than 0,05, we can state that the model cannot be considered significant.

Table 21: Multiple Linear Regression -> ROA = Gini + interactions with macro-industry

ROA

		Variables	Coeff.	Pr(>|t|)	Sign.
R^2	0,001850	(intercept)	-8,206	0,333	
Min	-529,460	Gini	9,033	0,462	
1Q	0,080	Fashion&Apparel	6,247	0,484	
Median	0,880	Automation&Mech.	7,788	0,368	
3Q	1,700	Furniture&HomeApp.	8,255	0,366	
Max	68,740	Food&Beverage	7,158	0,436	
Res. St. Error	18,72 (1034)	Gini:Fashion&App.	-7,799	0,545	
F-statistic	0,213	Gini:Automation&M.	-10,934	0,383	
p-value	0,9927	Gini:Furniture&HApp	-10,222	0,439	
		Gini:Food&Bev.	-8,360	0,528	

Source: Author's elaboration

Table 22: Multiple Linear Regression -> ROA = Gini + interactions with macro-area

ROA

		Variables	Coeff.	Pr(>|t|)	Sign.
R^2	0,008690	(intercept)	-5,295	0,1821	
Min	-525,180	Gini	6,305	0,2819	
1Q	-0,280	North-East	6,631	0,1753	
Median	0,330	North-West	4,507	0,3116	
3Q	1,700	Center	4,473	0,3245	
Max	67,230	South	3,561	0,2971	
Res. St. Error	18,64 (1036)	Gini:North-East	-14,244	0,0466	*
F-statistic	1,297	Gini:North-West	-5,888	0,3631	
p-value	0,2481	Gini:Center	-6,287	0,3432	
		Gini:South&Islands	-4,894	0,3384	

Source: Author's elaboration

Table 21 and Table 22 show the analysis of the multiple linear regression where the ROA is the dependent variable and the Gini index the independent one. As can be seen from the data there is no significance between the two variables and since the p-value is greater than 0,05, we can state that the model cannot be considered significant. Anyway, there is a negative slight significance in the interaction between Gini Index and North-East.

4.5 Discussion and managerial implications

The results of the set of analyses can be summed up in order to have a more complete view on the overall study, to better understand whether our hypothesis are confirmed or not. More specifically, the following tables contain the outcome of each analysis organized per type of regression model; the sign " + " indicating the presence of a positive correlation between the dependent and the independent variables, while, on the other hand, the sign " - " underlines a negative relationship.

Table 23: Summary of the results on Legal Status

Legal Status	Indep. Var.	with Macro Industry (Dummy variables)			
		Fashio&A.	Automation&M.	Furnitue&H.	Food&Bev.
Gini					
Equity	+	+	+	+	
Legal Status	Indep. Var.	with Macro-Area (Dummy variables)			
		North - East	North - West	Center	South&Islads
Gini					
Equity	+ +	+	+ +		

Source: Author's elaboration

Table 24: Summary of the results on ROE

ROE	Indep. Var	with Macro Industry (Dummy variables)			
		Fashio&A.	Automation&M.	Furnitue&H.	Food&Bev.
Gini					
ROA	Indep. Var	with Macro-Area (Dummy variables)			
		North - East	North - West	Center	South&Islads
Gini					

Source: Author's elaboration

Table 25: Summary of the results on ROA

ROA	Indep. Var.	with Macro Industry (Dummy variables)			
		Fashio&A.	Automation&M.	Furnitue&H.	Food&Bev.
Gini					
ROA	Indep. Var.	with Macro-Area (Dummy variables)			
		North - East	North - West	Center	South&Islads
Gini		*			

Source: Author's elaboration

Analyzing the results more in depth, we can see how the first hypothesis, *id est* higher level of proprietary concentration allows to make quick decisions, and, thus, respond more efficiently to the shocks, is not confirmed by the empirical analysis. We can also see that Gini Concentration Index has not significance in relation with the performance, neither if it is considered the interaction with the macro-industries nor with the macro-area. Thus, also, the second hypothesis is not confirmed by the data. However, what we find has some important managerial implications. By putting together, the results of our analysis, it follows that the ownership of the companies of our sample was not a determining factor for their survival. There are several reasons for this result. First, the allocation of the ownership in small and medium-sized companies is often up to the wrong

people or property group. There is a long history of family owned businesses with highly-concentrated ownership, poor transparency and absence of accountability that lead to abuse of minority shareholder rights (Feffer, 2009). In fact, a characteristic of the Italian system that can be generalized in other European countries, is that the transfer of the helm within companies, most of the times, take place through family agreements and not for the proficiency of those who will take the reins of the organization. This hypothesis is also confirmed by some studies that have shown that the market reacts negatively to the appointment of family heirs as managers (Pérez-González, 2001), while Villalonga and Amit (2004) have suggested that the control of the company by the ownership is lower if top management is part of the family.

This, once again, highlights how the lack of a market for corporate control, where the majority shares can be exchanged, causes damages to the companies. This finding is therefore in line with some recent studies (among others Sinha, 2006) that have shown how the presence of a market for corporate control has positive effects on the performance of some industries compared to others in which there is not or it is still weak.

Instead, the analysis made on the equity suggests some considerations that are anything but self-evident. The regression models in which we considered the equity, show a strong probability of survival of the companies that, during the decade between the crisis, have increased their own financial commitment. This implies that, a small and therefore presumably family company with a concentrated property that increases the level of capitalization, communicates that the family believes in business. It has long been discussed in literature that, in periods of difficulty, a high involvement with the business, its history and the emotions it arouses, can lead to not recognize the dangers. This way of doing, typical in family businesses, produces a lack of clarity in realizing what the future of the organization will be, and this often turns into a stubbornness of ownership towards the company. Our data, on the other hand, show that the increase in equity, as well as being a symptom of believing in what is doing, is, also, a driver for resilience. This means that the family with its involvement, its network of relationships, and, above all, with the financial commitment is able to manage the shocks. If a company, in a period of general crisis, invests, it is both for the emotional drive but also because it has a clear entrepreneurial project that wants to launch on the market. If ownership engages with its own assets, it means that the company sees the light even in a dark moment and plans the

future despite the crisis. This has positive implications also for the so-called *"butterfly-effect"* (Annarelli and Nonnino, 2016).

Moreover, the backbone of the Italian production system is made up of medium-small manufacturing companies, which, as we have already seen in Chapter 3, have proven to be resilient. If we take into consideration the 76% of the companies still active in 2017 of our sample and the results of the regressions, it is possible to see that an epochal change is taking place in the management logic of Italian manufacturing system. In fact, one of the characteristics of Italian small-medium companies has always been their under-capitalization. But as the data suggests, companies that have increased equity have improved their profitability and have a higher survival rate. Also this finding is in line with other studies. For instance, a Bankitalia' study reported by Il Sole 24 Ore show that there is an improvement on what for decades has been perceived as the atavistic knot of Italian companies: the undercapitalization and the heavy dependence on the banking system. According to Longo (Il Sole 24 Ore, 2017), corporate leverage ratio declined 10% between 2011 and 2016 (it was 50%), and the net financial position that in 2008 was negative by 2%, in 2016 is positive for more than two points. If these data cannot suggest a true and definitive change of direction, however Italian companies have taken the first step towards a higher independence from the banking sector.

4.6 Future researches

The future research lines of this topic should aim to tackle the limitations of this research and to improve the analysis we have defined.

In particular, it is considered necessary to conduct a more in-depth analysis of the level of financial dependence. In fact, it was clear from the Discussion and managerial implication (4.5) that the companies of our sample have partly denied the old characteristic of their undercapitalization. The data of Bankitalia and some further scholars' elaboration have also suggested how Italian companies are becoming less and less dependent on the banking sector, sometimes preferring different financing methods. Analyzing whether this trend is also present in the sample of this study, could allow us to state that Italian Made in Italy, in addition of being largely representative of the entire manufacturing system of the country, is also a good predictor of managerial trends.

Furthermore, it is considered appropriate to enrich the study also with business cases. The analysis within companies can help to learn more about the drivers of resilience, as well as been such an inspiration for managers.

4.7 Conclusion

This chapter began by enunciating the hypotheses and the related research questions: «Does the concentration of the Share Capital influence the companies' capacity of survival? And is Equity a good predictor for resilience? » and «Does the Gini concentration index affect performance? ». We therefore developed the paragraph related to the methodological note and carried out the two regression models that allowed us to answer the research questions. aforementioned What emerged from the analysis led us to formulate considerations that are anything but obvious. Although our hypothesis was based on the greater ability to react to the crisis by organizations that had a greater concentration of ownership, the empirical analysis has defeated this assumption. In fact, it has emerged that higher degree of proprietary concentration does not affect the probability of surviving the crisis. Furthermore, even the hypothesis that higher concentration could be a driver for greater performance was rejected by regression models. These results can be traced back to various reasons, among which the lack of a market for corporate control has been emphasized.

Otherwise, equity revealed significant data. In fact, a high level of capitalization increases the chances of surviving the crisis. The considerations that have emerged have been many and varied. The ownership that believes in the entrepreneurial project and engages both emotionally and economically has positive implications on the long term and is more capable of resisting the turbulence. Our analysis and our considerations are also in line with the change in trend of Italian companies that are becoming less and less bank-dependent.

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