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FINAL THESIS

ROLE OF SMES IN WORLDWIDE RECOVERY: A FOCUS ON

COLLABORATIVE ASYMMETRIC PARTNERSHIPS



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ABSTRACT

This final dissertation aims to investigate the role of formal *Collaborative Asymmetric Partnerships* for small and medium-sized enterprises. The after-crisis economic scenario has created new challenges to face globalization giving growing importance to new relational networks. Many different strategies have been adopted by SMEs in order to recover from the recession; one excellent example is given by relationships among firms, as a new trend of inter-firm resource management. This thesis focuses on the importance of collaboration and co-creation in Asymmetric Partnerships between firms with evident differences in size, resource portfolio and market position. A Survey and some interviews display the empirical evidence.

L'elaborato si propone d'indagare il ruolo delle *Collaborative Asymmetric Partnerships* formali per le piccole e medie imprese. Lo scenario economico creatosi in seguito alla crisi finanziaria ha generato ulteriori difficoltà nell'affrontare la globalizzazione dando crescente importanza alle nuove reti relazionali. Diverse strategie sono state adottate da parte delle PMI, al fine di riprendersi dalla recessione; un esempio eccellente è dato dalle collaborazioni tra imprese, come nuova tendenza di gestione inter-aziendale delle risorse. Questa tesi si concentra sull'importanza che hanno collaborazione e co-creazione nelle *Asymmetric Partnerships* cioè tra imprese con evidenti differenze in termini di dimensioni, disponibilità di risorse e posizione sul mercato. L'evidenza empirica di tale studio è presentata attraverso un sondaggio e alcune interviste.

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Introduction

The objective of this final dissertation is to give a contribution to the existing literature concerning *Collaborative Asymmetric Partnerships* as a tool for SMEs' growth and scale-up.

The number of partnerships, in the last years, has rapidly increased as a consequence of the open market in which the globe has evolved; it has forced the presence of new instruments, such as incubators, accelerators, and other platforms which drive to a grater number of working relationships between SMEs, more frequently innovative start-ups, and the high growth business community. SMEs important role in economic growth, especially in European countries, is due to their structural and size-related characteristics. Innovative features, proper of the entrepreneurial approach, have helped deal with the recession and have vastly highlighted SMEs' contributing evolution in job creation through time.

Throughout this work, the author's purpose is to comprehend the challenges faced by SMEs during the financial crisis and to study the possibilities of growth in the subsequent period. One of the latest trends in worldwide economy involves collaborations with unconventional partners: Universities, other companies, etc. One nature of partnership that appears to be the more challenging is the one involving firms with evident differences in size, resource portfolio and market position, called *Asymmetric*.

The active collaboration between such different partners, namely a SME or start-up and a large enterprise, has many implications: Which are the challenges two actors must face to overcome all their differences and build a successful relationship? Furthermore, which are the advantages of such an effort? These are the subjects of the analysis taken, firstly, on a theoretical perspective, and, secondly, throughout an empiric study built on a questionnaire for SMEs and a deeper analysis of few cases.

The study is structured in four phases in order to give an overview of the context in which the main theme takes place, and, only after that, to examine it. The phases correspond to four different chapters. Firstly, the paper presents an overview on the SMEs' role across the world. In order to have a complete basis, it starts with de definition of small and medium-sized enterprises entering in the specifications regarding their importance as the object of this study. The presence of a literature review helps clarify the various analyses taken into

consideration during the early stage of research. After a brief introduction on the situation before and during the financial crisis, the presence of a punctual exploration of the post-crisis scenario is given. Accordingly, this chapter investigates the role of external factors, such as policy makers, in the support of SMEs resistance to crisis-related challenges, besides internal factors, in particular through an analysis of resilience capabilities, innovativeness, and entrepreneurship. This first section, as a result, gives a snapshot of the SMEs' financing evolution through time and the consequent effects to their performance and job creation after the recession.

The second chapter offers a focus on the Italian SMEs' situation. In Italy 99.9% of firms are SMEs; 95.9% of them, in 2012, were Micro¹ enterprises. Domestic activities were vastly affected by the crisis, as a consequence, the industrial production contracted over the period. SMEs sectors relied less on external demand and, for this reason, they largely accused the decrease in domestic demand. This section presents an analysis of the economic change, e.g. in credit conditions, and it also refers to the governmental interventions and the future strategic choices a SME in Italy can implement; in particular through innovative instruments, the process of internationalization, and more strategic alliances (such as *Collaborative Asymmetric Partnerships*) driven directly by the two stakeholders or a third actor involved to scout and match possible partners.

The third chapter, which concludes the theoretical part, is a clarification and more accurate specification of the concept of *Collaborative Asymmetric Partnerships* and all its opportunities. The notion is recent (Barabel, Meier, & Soparnot, 2016), however it refers to a phenomenon already seen and highly developed (primarily between large corporations and innovative start-ups) that is strictly correlated to the concept of innovation. After having declared all the advantages connected to the collaboration, for both partners, this section aims to explain the steps involved in the creation of it: *Prepare, Partner,* and *Pioneer*. Each phase corresponds to some prerequisites to be assessed in order to build a successful partnership, from the clarification of objectives, to the selection of partners, to the management of the relations. Moreover, this section explores the different types of relationships that can be involved, considering the degree of integration, and then it divides possible partnership categories in four groups considering, as a criterion, the degree of resource intensity. To

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¹ SMEs are constituted by micro, small, and medium-sized enterprises. For further information on their definition rely on next chapters.

conclude, an analysis of management challenges is given in order to build a schematic idea on possible suggestions to overcome them.

The last chapter gives evidence to the entire previous considerations across an empirical study. The analysis is obtained through a personal research based on a questionnaire submitted to Italian SMEs and start-ups and some interviews with actors in Collaborative Asymmetric Partnerships. The people involved are representatives of two accelerators, five start-ups and four medium-large companies. After having analysed all the data, the purpose is to compare the answers and perceptions of companies with evident differences in size, market position and resource portfolio in order to confirm the previous considerations about which are the mistakes that must be avoided to build a successful collaboration and give some suggestions to overcome this barriers. Through the interviews, the importance of such partnerships will become evident thanks to all the personal experiences described.

1. SMES IMPACT DURING THE FINANCIAL CRISIS

Pre & After Crisis Scenario is an overview on small and medium-sized enterprises. The whole study concerns the behaviour of SMEs through time and their recovery strategies; therefore, an accurate analysis of their main aspects must be done. In the chapter, the importance of this type of firms is explained within its definition, literature review, and focuses on performances and recovery strategies during and after the crisis. Such a change in environmental conditions requires a separate investigation, pre and after, in order to compare how it has modified the role of SMEs so far.

1.1. SMALL AND MEDIUM-SIZED ENTERPRISES

Before examining SMEs performance, it's fundamental to clarify what, exactly, we mean for small and medium-sized enterprises, and why they are considered important and chosen as the objective of this study.

1.1.1. <u>Definition of SME</u>

Realizing a cross-country investigation of SMEs data can be very challenging because of the absence of a universal definition of what constitutes a small and medium-sized enterprise. When building a database, for example on financial constraints, the difficulties of collecting data derive not only from the absence of monitoring and lack of common indicators all over the world, but also from the fact that even if these indicators exist, they might have been adopted for SMEs without a standard definition (Ardic, Mylenko, & Saltane, 2012). Nonetheless, efforts have been made to synchronize SMEs' definitions globally (OECD, 2004), despite their nature and the different environments in which they operate, are unique for their heterogeneity; therefore, obtaining a worldwide definition results almost impossible. On a European level, instead, the first EU framework of reference was announced in 1996 by

the Commission with the *Recommendation 96/280/EC of 3 April 1996 concerning the definition of small and medium-sized enterprises*; however, the current version of the SME definition derives from a revision made in 2003 in order to display new economic developments and reflect discussions and consultations among the Commission, Member States, experts and business organisations.

Since 2003, minor changes have been applied, because the policy of "less and better targeted State Aid²" has been adopted, and the pressures of a number of stakeholders did not justify the disadvantage caused by any significant change to the definition. Accordingly, the 2012 Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs study, focused on definition changes in the period between 2006 and 2009, concluded that there is no need for a major revision of the SME definition at the present time (European Union, 2015). However, even though a common definition could have helped improve the consistency and effectiveness of SME policy across the EU, not all State Aid rules adhered to the implementation but tended to interpret it in a less strict way; part of these interpretations are evidently based on the 2003 definition, others only apply the SME definition in part; indeed, for Member States, the use of the definition is not compulsory.

It might be thought that the enterprise's size (employees, turnover and balance sheet total) is the only factor taken into account for decreeing the presence of a SME; however, the relationship that an enterprise could have with another should also be considered. As a consequence of this reasoning, three categories correspond to each alliance (European Union, 2015) and determine the degree of control, both legal and de facto³, that needs to be assessed; as a consequence, the category in which the SME is included is important in order to understand whether the data from other enterprises must be considered when making the size-related calculation.

• Autonomous: if the enterprise is either completely independent or has one or more minority partnerships, each less than 25%;

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² The principle of "less and better targeted State Aid" was adopted by the *Lisbon Strategy* and is in line with the modern concept of competition policy: not as an aim in itself, but as an instrument to improve the benefits of a free market economy. The *Lisbon Strategy* refers to a broad range of objectives and policy tools initially defined in the European Council conclusions of Lisbon in 2000, with the ambitious strategic goal 'to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion'. Kleiner, T. (2005). Reforming state aid policy to best contribute to the Lisbon Strategy for growth and jobs. Competition Policy Newsletter; European Union.

³ It is not only the capital or shareholdings, but also the control that one enterprise has over another.

- Partner: if holdings with other enterprises rise to at least 25% but no more than 50%;
- Linked enterprise: if holdings with other enterprises exceed the 50% threshold.

Furthermore, before verifying all the criteria needed to be included in the definition, it is essential to take into consideration the European definition of what is an enterprise as "any entity engaged in an economic activity, irrespective of its legal form"; and, consequently, attesting the presence of all size features (European Union, 2015):

- 1. Employs⁴ fewer than 250 people;
- 2. Has either an annual turnover⁵ not exceeding \in 50 million <u>OR</u> an annual balance sheet total⁶ not exceeding \in 43 million.

These are the characteristics the enterprise must have to gain the SME status; it will lose it if it exceeds one of the maximums for two consecutive accounting periods. Equally, a large enterprise, whose levels decrease considerably for two consecutive accounting periods, will benefit of the status. Although, the two-period principle does not apply in the case of enterprises that exceed the relevant SME limits as a result of a change in the ownership as a consequence of a M&A, which is evidently not temporary.

SME definition includes, under its established thresholds, further subclasses representing other three ranges of number of employees and turnover or balance sheet total: micro-enterprises are enterprises employing fewer than 10 people and whose annual turnover or annual balance sheet total does not exceed \in 2 million; $small\ enterprises$ are enterprises employing fewer than 50 people and whose annual turnover or annual balance sheet total does not exceed \in 10 million; and medium-sized enterprises are enterprises employing fewer than 250 people and either have an annual turnover that does not exceed \in 50 million, or an annual balance sheet total not exceeding \in 43 million.

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⁴ Employees not included in staff headcount: apprentices or students who are engaged in vocational training and have apprenticeship or vocational training contracts, and employees on maternity or parental leave (*European Union*, 2015).

⁵ Annual turnover is determined by calculating the income that an enterprise received during the year in question from the sale of products and provision of services falling within the company's ordinary activities, after deducting any rebates.

⁶ The annual balance sheet total refers to the value of a company's main assets.

TABLE 1 - MICRO, SMALL AND MEDIUM-SIZED DEFINITION

	EMPLOYEES	ANNUAL TURNOVER	ANNUAL BALANCE SHEET TOTAL	
MEDIUM-SIZED	< 250	≤€ 50 million	Or	≤€ 43 million
SMALL	< 50	≤€ 10 million	Or	≤€ 10 million
MICRO	< 10	≤€2 million	Or	≤€2 million

Source: adapted from (European Union, 2015).

1.1.2. Importance

SMEs' importance is not only related to their size, it is now well known that small businesses are not "scaled-down versions" of large businesses (Penrose, 1959). The differences between large and small enterprises are related to their process of evolution rather than scaling and refer to management changes through time. The reason why many studies have devoted considerable attention to SMEs, involves the percentage of enterprise population, which consists almost entirely of small and medium-sized enterprises in all EU Member States and a huge part of the economic actors in other developed countries⁷. If considering some numbers in Europe: around 99% of the total amount of the enterprise population is composed by SMEs in Luxembourg and Germany, and more than 99.9% in Portugal, Italy, and Greece (European Commission, 2015). Therefore, SMEs occupy a central position in the economic growth and recovery from the financial crisis, and cover a huge portion of added value for all member states, even though their economic contribution among them varies markedly. As the Annual Report on European SMEs 2014/2015 shows, in 2014 micro SMEs play a relatively more important role in Southern and Eastern Europe (Croatia, Czech Republic, Greece, Hungary, Italy, Portugal, Poland, Slovakia, Slovenia and Spain) than on average in the EU28 and also in Belgium and France (Cressy & Olofsson, 1997).

The impact of SMEs in worldwide economic growth and, consequently, employment rate, constitutes the main reason for their study that, in this case, is developed looking at their transformation through time due to the necessity to stabilize during the crisis.

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⁷ As in the EU28, SMEs account for more than 99% of all enterprises in the partner countries (Albania, the Former Yugoslav Republic of Macedonia, Iceland, Moldova, Serbia, and Turkey) and in the USA, Japan, and the BRICs (Brazil, Russia, India, and China). European Union (2015). *Annual Report on European SMEs 2014/2015 SMEs start hiring again*. Bruxelles: Karen Hope.

Micro(1-9) Small (10-49) Medium (50-249) Large(250+)

100% 95% 85% 80% 75% 1TA NZL ESP GBR HUN NLD FIN SWE PRT BRA CAN FRA AUT LUX JPN BEL USA NOR

FIGURE 1 - SHARE OF FIRMS OF DIFFERENT SIZE BY OECD COUNTRY

Note: The period covered is 2001-2011 for Belgium, Canada, Finland, Hungary, the Netherlands, the United Kingdom and the United States; 2001-2010 for Austria, Brazil, Spain, Italy, Luxembourg, Norway and Sweden; 2001-2009 for Japan and New Zealand; 2001-2007 for France; and 2006-2011 for Portugal. Sectors covered are: manufacturing, construction, and non-financial business services. Owing to methodological differences, figures may deviate from officially published national statistics. For Japan data are at the establishment level, for other countries at the firm level.

Source: adapted from (Criscuolo, Gal, & Menon, 2014).

1.2. <u>Literature Review</u>

Reflections about what's best, big or small, have been made since the first economists started studying the role of enterprises in the economic environment. Schumacher's "Small is beautiful: Economics as the people matters" (1973) is a first approach on what scholars and economists say is better for development and which are the examples in the modern era; economies deriving from large-scale manufacturing production, for instance, can be treated as a symptom of success as a consequence of high investments in physical capital by large corporations, but Schumacher tries to appreciate the role of small-sized enterprises to conglomerate and constitute bigger organizations; even if a global trend to force economies of scale creates a number of new large enterprises as never done before, it is also true that small enterprises are proliferating (Schumacher, 1973). The literature has devoted considerable attention to the setting up and features of SMEs thanks to their role in both national and international context (Biggs, 2003); and what is repeatedly related to them is the concept of Entrepreneurship: small and medium-sized enterprises as perfect incubators of innovativeness and entrepreneurial approach (Johnson & Cathcart, 1979) in what is considered the era of the

"New Economy⁸". The changing role of entrepreneurship reflects a new view on the economic system where innovative advantages from different types of firms can be found. Acs & Audretsch (1988, 1990) pinpoint that small firms provided the engines of innovative activities, at least in certain industries. Audretsch *et al.* (2006) suggest that, in addition to labour, physical capital, and knowledge capital, the endowment of *entrepreneurship capital* also matters to generate economic growth.

The entrepreneur, as the prime cause of economic development (Schumpeter, *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle*, 1934), has been studied related to SMEs and their features. For instance, flexibility and innovativeness of both small enterprises and entrepreneur (Biggs, *Is Small Beautiful and Worthy of Subsidy?*, 2002) are considered essential in periods of environmental changes in order to pursue common good; the role of democracy and free establishment is used to underline the importance of being flexible in order to face changes (Schumpeter, *Capitalism, Socialism and Democracy*, 1942).

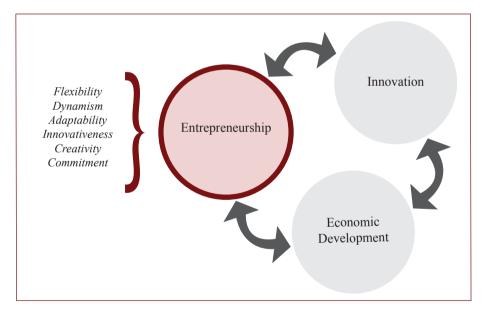


FIGURE 2 - ROLE OF ENTREPRENEURSHIP IN THE ECONOMIC DEVELOPMENT

Source: Author.

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⁸ The *New Economy* era represents the last of three historical periods but also three economic models. The first emphasizes the importance of physical capital and corresponds to the public policy debate framed by the Solow model. The second emphasizes the importance of knowledge and corresponds to the Romer model. The third focuses on the role of knowledge-based entrepreneurship and corresponds to a shift in the public policy debate aimed to understand how to create an entrepreneurial society (Audretsch D., 2008).

⁹ Entrepreneurship capital refers to the capacity for the geographically relevant special units of observation to generate the start-up of new enterprises.

The 2008-09 collapse took place alongside a global recession and, unlike the previous two crises, the financial sector is identified as the source of it (Athey, 2009; Hills *et al.*, 2010). Chow and Dunkelburg (2011) suggest that recessions originated by financial crises are unusually severe, and affect the small business sector disproportionately reducing availability of finance (Price, Rae, & Cini, 2013), as small firms were identified as a greater investment risk than larger firms (Sahin *et al.*, 2011; Taylor & Bradley, 1994). Late payment of debts is also thought to have severely affected SMEs, and the cash flow of small companies in particular, during the recession (Paul & Boden, 2011).

Due to the percentage of SMEs in the economic activity (Duarte, 2004), they have been studied vastly and, as a consequence, generated a number of sceptical views about their actual contribution to economic development: quality of jobs (Pagano & Schivardi, 2001; Pack & Westphal, 1986), real job creation (Little et al., 1987), importance of the business environment, (Beck, Demirguç-Kunt, & Levine, SMEs, Growth, and Poverty: Cross-Country Evidence, 2005) are just some examples of critics. However, the empirical evidence of SMEs' special contribution to economic development has been studied extensively trying to define some common indexes: SME250 as an indicator of maximum number of employees, INFO GDP as the countries with reliable gross domestic profit information, SME GDP as the contribution to GDP by SMEs in the countries with both data (Biggs, Is Small Beautiful and Worthy of Subsidy?, 2002). Many sources has been used: IADB, UNECE, OECD, APEC, WB RPED (Ayyagari, Beck, & Demirguç-Kunt, 2002) to delineate cross-country studies (Beck, Demirguç-Kunt, & Levine, 2005) and have access to firm variables on profitability: industry concentration, marketing, flexibility, and dynamic role (Duarte, 2004). Creating a database of SMEs is a challenging task, because of the lack of a common definition and of territorial monitoring (Ayyagari, Beck, & Demirguç-Kunt, Small and Medium Enterprises across the Globe: A New Database, 2002) although studies concerning general features have been carried out.

Ayyagari *et al.* (2005) investigate the impact of access to finance, property right protection, provision of infrastructure, inefficient regulation and taxation, and broader governance features such as corruption, macroeconomic and political stability on firm growth. Beck and Demirguç-Kunt (2006) built a financial constraint database in order to demonstrate that there is substantial evidence that small firms face larger growth constraints and have less access to formal sources of external finance. Both in the developing and developed world small firms have been found to have less access to finance and to be more constrained in their

operations and growth (Berger & Udell, 1998; Galindo & Schiantarelli, 2003; Ayyagari, Demirgue-Kunt, & Maksimovic, 2011).

"As argued by many, SMEs are more flexible, speedier and adaptable than larger organizations. Constrained by size-related disadvantages, small firms typically rely on flexibility and timely responsiveness to customer needs to create and serve profitable market niches. The positive relation found in this study between the capacity to transform and profitability appears to render support to the widely held notion that quick response to market signals is vital for the survival of small firms."

CALOGHIROU, Y., ET AL., 2004

Flexibility is one of the most important features that characterise SMEs; it has a direct linkage with economic growth, and is a concept usually compared to economies of scale of large enterprises: what's best? (Thurik, 1994); it depends on the marketplace, and on the spatial and temporal characteristics of the environment (Biggs, *Is Small Beautiful and Worthy of Subsidy?*, 2002). In his work, *Innovation and Industry Evolution*, Audretsch (1993) suggests that small firms, at least in some situations, are not smaller clones of the larger incumbents, but rather agents of change through innovative activity. Innovation, thus, is a current concept while speaking about small and medium-sized enterprises (Schumpeter, 1934); their dynamic role in the economic environment (Duarte, 2004) and predisposition to change is due to the organizational flexibility and innovating capability: Acs and Audretsch (1987) observe that the innovation rate per 1000 employees in the USA, on average, is higher in small firms (<500 workers). But this average figure differs among industries: the data indicate that small firms have higher innovation rates in what can be classified as "high technology", skill-intensive industries (Barabel, Meier, & Soparnot, 2014).

When SMEs are involved in world markets, they tend to be indirect exporters, supplying intermediate inputs or subcontracting to larger export firms (Biggs, 2002). The reason is the high transaction costs of dealing with international markets, which can be exceedingly high for small firms (Nooteboom, 1993). Small firms are burdened more with the cost of acquiring and processing information and have greater difficulty coping with export opportunism and other contract enforcement problems (Beck & Demirguç-Kunt, 2006). One way to overcome these difficulties is throughout collaborations; many academics have openly underlined the importance of co-operation for innovation in order to conquer a modified marketplace and displace current product lines in favour of entirely new categories in a dynamic environment (Jorde & Treece, 1990; Von Hippel, 1987; Qiuntana-Garcia & Benavides-Velasco, 2004; Carayannis & Alexander, 1999). Innovative and flexible nature of

young ventures is the primary reason why incumbents are interested in collaborating with them. On the other hand, large firms give to SMEs the opportunity to gain in experience and implementation of ideas through production, marketing, commercialization and branding capabilities (Hogenhuis, Hende, & Hultink, 2016). Asymmetric partnerships (Chtourou & Laviolette, 2015) are the focus of these collaborations in which the partners differ significantly in size, resources or commercial experience (Minshall, Mortara, Valli, & Probert, 2010).

The modern and innovative approach to market changes, proper of SMEs, has been recognised as a source of recovery from the crisis thanks to the contribution to job creation (Biggs & Shah, 1998; Kok, Deijl, & Essen, 2013; Ayyagari, Demirguc-Kunt, & Maksimovic, 2011) and social development (European Commission, 2015; Cucculelli, Bettinelli, & Renoldi, 2014)¹⁰.

1.3. SMEs during Global Crisis

The recent 2008-2009 financial crisis affected the entire world, including developing countries. It is considered global even if the impacts varied markedly across different countries; and it has been esteemed to be one of the most severe in modern history (Cattaneo *et al.*, 2010). The explanations for such a recession have been numerous: from institutional and cultural to neoclassical and Marxist, and geographers have emphasized the importance of spatial perspectives in order to fully understand it (Gowan, 2009; Harvey, 2011; Martin, 2011; Smith and Swain, 2010). However, what seems to be clear is the different impact that it had on large established firms and small and medium-sized enterprises. In contrast to large enterprises, SMEs tend to have a weaker financial position, they have difficulties in negotiating contracts with banks for short or long-term credit, and, consequently, in a time of credit contraction, the problems of access to credit can become acute for a larger portion of SMEs (Erixon, 2009). These aspects are the result of their nature of small, flexible, firms with fewer internal resources and less liquidity, a smaller propension to export-oriented strategy (if

¹⁰ For a detailed table on the Literature taken into consideration for this *Literature Review Paragraph* see **Annex I**.

not through a collaboration with a bigger enterprise, or if not in presence of a *born global*¹¹), and fewer possibilities to downsize employment - the choice is often not between keeping employees or reducing their number, but it is between keeping employees or going out of business (Erixon, 2009). What complicates the impact of the recession is that SMEs seem to be more vulnerable and sensitive to changed financial conditions. Moreover, access to finance appears to be one of the most relevant challenges small and medium-sized enterprises, especially innovative ones, must face for their own creation, growth and survival.

The OECD "Impact of the Global Crisis on SME and Entrepreneurship Financing and Policy Responses" presents the results of a survey¹², among member and non-member countries, conducted in January and February 2009, in order to contribute to the OECD "Strategic Response to the Financial and Economic Crisis" launched by the Secretary General. This report was created to stress the importance of SMEs that, even in "normal" economic conditions (e.g. before the recession), need the support of governments through ad hoc policies and programmes; they represent the employment vehicle for more than a half of the labour force in the private sector, but are also more vulnerable than larger enterprises in times of crisis for many reasons (OECD Centre for Entrepreneurship, 2009):

- Difficulties to downsize;
- Less diversification:
- Weaker financial structure (viz. lower capitalisation);
- Lower or no credit rating:
- Heavy dependence on credit;
- Fewer financing options.

Countries' abilities to deal with the crisis depend, to a large extent, on the margin provided by the respective fiscal and monetary policies. The crisis scenario of impacts on SMEs and entrepreneurship financing and SME demand of credit is given by Table 1; it is an overview deriving from the 2009 *Turin Round Table* discussion on the OECD survey.

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¹¹ Born global is a type of company that from the beginning of its activities pursues a vision of becoming global and globalizes rapidly without any preceding long term domestic or internationalization period. The entire business strategy is focused on a global marketplace. Knight, G. A., & Cavusgil, S. T.; 2004. Innovation, organizational capabilities, and the born-global firm. Journal

of International Business Studies , vol. 35.

¹² The findings were presented ad the Turin Round Table, which gathered more than 100 participants from thirty-seven countries, economies and financial international institutions.

TABLE 2 - EXPERIENCED IMPACTS OF THE CRISIS ON SMES AND ENTREPRENEURSHIP

	IMPACTS ON SMES			SME DEMAND FOR CREDIT		
	Demand	Payment delays	Insolvencies & bankruptcies	Total	Short- term	Long-term
OECD						
Australia		+				
Austria			=			
Belgium		++	+	-		-
Canada		+	-	+		
Czech Republic			=			
Denmark			++			
Finland		++	+			
France		+	+			
Germany	-		=	-		
Greece		+	=			
Hungary			+		+	-
Ireland			+++			
Italy	-	+	+ +	-	=	-
Japan	-	+				
Korea	-	+			+	-
Luxembourg	-	+	+	-		
Mexico	-	+				
Netherlands	-	+				
New Zealand		++	+			
Poland	-			+		
Spain			+++			
Switzerland			=			
UK		+	+		+	
USA					+	
EC						
NON OECD						
Chile	-					
Estonia			=			
Russia	+	+				
Slovenia			=			

Source: adapted from (OECD Centre for Entrepreneurship, 2009).

Note: One or more "+" signs (depending on the intensity) indicate an experienced or expected increase on the impacts for the indicators in each column. A "=" sign indicates no change, and one or more "-" signs indicate an expected or experienced decrease.

Accordingly to the OECD data collected through its 2008 surveys, the overall perception of SMEs during crisis is almost homogeneous; here are reported only the experiences of countries that did give a feedback, even if, in some cases, the answer was not complete for all the topics investigated. It displays the impact of recession on two sides: the

first is about the influence of the crisis on demand and market conditions, the second is about the differences on credit conditions deriving from it. The table shows the tendencies during 2009, in the middle of the crisis.

The situation is clear for what concerns the demand decrease during the first year of recession; nearly all OECD countries participating gave the same feedback, a profound reduction, whereas Russia declared a rise. The increase of working capital and payment delays, similarly, is a uniform aspect of this survey; all examined countries gave the same answer in stressing the imminent problem. However, for what concerns insolvencies and bankruptcies the situation was very mutable: countries like Canada and the Netherlands registered a decrease; Austria, Czech Republic, Germany, Greece, Switzerland, Romania and Slovenia, in their feedback displayed a stable portrait. That doesn't highlight strong differences from the previous years, but, on the contrary, other countries such as Belgium, France and UK declared an increase in insolvencies and bankruptcies that, for some others, like Ireland, Italy, and Spain was a real boost. The second part of the table shows a total average decrease of demand of credit that derives mostly from the long-term evidence of absence of new investments (OECD Centre for Entrepreneurship, 2009).

1.4. SMEs after Global Crisis

The reaction of SMEs to the recession is differentiated and recovery strategies that have been implemented are a consequence of many factors. The governmental and institutional support for small and medium-sized enterprises, which has been studied extensively by the European Commission and the OECD, highlighted their resilience capabilities. In the next paragraphs is given a more accurate representation of these characteristics that make SMEs such an interesting subject, with a focus on innovativeness and entrepreneurship as tools to face the crisis; furthermore, the financial point of view will be analysed trough time in order to better understand the current worldwide performance of SMEs, especially for what concerns job creation after the recession and compared with large established enterprises.

1.4.1. Policy makers' support

The post global financial and economic crisis hit young firms and SMEs by changing their financing possibilities (i.e. forcing financial institutions to restrict their lending and investment activities). Accordingly, one of the outcomes of the recession has been the presence of greater liquidity problems, and, as a consequence, a major immediate impact in terms of supply chain disruption and increased unemployment. In the long term, this would create a higher pressure on the chances of an innovation-related recovery by diminishing potential new entrepreneurial projects and growth of SMEs worldwide.

The Commission of the European Communities, in the middle of the crisis (2008), presented the *European Recovery Plan* in order to implement a strategy based on solidarity and social justice to face the recession. It had some strategic aims: firstly, reinforce demand and stimulate consumer to be more confident in future perspectives; secondly, face the increase of long-term unemployment by minimizing the human cost of the recession and help people return rapidly to the labour market; thirdly, help Europe to stay competitive once the recession will contract¹³ (Commission of the European Communities, 2008). Accordingly, in order to support all these necessities, structural reforms, innovation support, and a flexible economy must be put into practice. This will leave Europe well prepared to future challenges and encourage new technologies and opportunities in fast growing world markets.

OECD tried to face recession as well; through its *Working Party on SMEs and Entrepreneurship* (2010), the OECD has been strictly involved in assessing SMEs and entrepreneurship financing issues and recommending policy actions, as already done in the OECD *Brasilia Action Statement for SME and Entrepreneurship Financing* (2006). In 2009 they started collecting data from surveys in selected countries in order to understand the actual implementation of official support programmes for SMEs' and entrepreneurs' access to finance after the crisis. The main findings of the OECD assessment can be seen in the following Table.

Data from the *European Central bank* confirm that SMEs were affected more than larger companies by the banks' reluctance to lend (OECD, 2010) especially in the Euro zone. Accordingly, the *OECD Pilot Scoreboard on SME and entrepreneurship finance* displayed that the share of SME loans in total business loans declined in most of the 11 countries.

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¹³ For more extensive explanations, refer to the Lisbon Strategy for Growth and Jobs, 2009.

Interest rate spread between SMEs and large firms increased, e.g., deteriorating from 1.4% to 3.1% in Canada, 0.8% to 1.3% in Italy and 1.2% to 1.3% in France between 2007 and 2009. However, specific analyses by the European Community and OECD (2010) suggest that he recession led not so much to a universal credit crunch on SMEs, but it was more relevant for certain types of SMEs. Therefore, the problem of access to financing appeared to be a problem faced by only a certain percentage of companies in particular circumstances rather than all small and medium-sized enterprises.

TABLE 3 - GOVERNMENT PROGRAMS FOR SMES ACCESS TO FINANCE, 2008/2010

	LOAN GU	ARANTEES		EXPOR	T FACILITAT	TION
	Working Capital	Investme nt Capital	DIRECT CREDIT	Capital Of Export Support Institutions	Export Credits	Export Guarantee s
Australia					✓	✓
Austria	✓	✓	✓			
Belgium	✓	✓	✓	✓		✓
Canada	✓	✓	✓	✓	✓	✓
Czech Republic				✓	✓	✓
Denmark	✓	✓	✓	✓	✓	
Estonia	✓	✓	✓			✓
Finland	✓	✓	✓	✓	✓	✓
France	✓	✓	✓		✓	✓
Germany	✓	✓	✓	✓	✓	✓
Greece	✓					
Hungary	✓	✓	✓			
Ireland						
Israel			✓		✓	✓
Italy	✓	✓			✓	✓
Japan	✓	✓	✓	✓	✓	✓
Korea	✓	✓	√			✓
Netherlands	✓	√	✓	✓		✓
New Zealand					✓	✓
Poland	✓	✓				✓
Portugal	✓	✓				
Slovak Republic			√			
Spain	✓	✓	✓	/	✓	
Sweden	✓	✓		✓	✓	✓
Switzerland				✓		
Turkey	✓	✓	√		✓	✓
UK	✓	✓	✓			
USA	✓	✓	✓			

Source: adapted from (Potter & Thompson, 2011).

The OECD Working Party on SMEs and Entrepreneurship conducted surveys of policy makers to identify the measures they were introducing. Most OECD members introduced new plans or enhanced existing ones during the period after the crisis, between 2008 and 2010. The main interventions can be divided into three types: government loan guarantees and direct official loans; export facilitation; and credit mediation. Table 2 shows the nature of the main measures used by the surveyed countries (Potter & Thompson, 2011).

1.4.2. <u>Resilience capabilities</u>

Resilience is a concept that has gained popularity in the past years and for which many definitions can be found. In 2009, the United Nations defined it as:

"The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions."

United Nations, 2009

Sir Francis Bacon used the term in his writings in the 17th century, "resiliency" and "resilience", deriving it from the Latin *resilire* ("springing back"), but the word has seen an intense increase in its use especially after 2005. Sullivan-Taylor and Branicki (2011) studied the impact of sector, geographic location and industry on organisational resilience and found that small firms can have an advantage over larger firms since they normally have less bureaucracy, the possibility of rapid decision-making and rapid communications, as well as shorter processes¹⁴. Stokes (2012) is an example of researcher who argues that smaller firms have to cope with more uncertainties, but this condition allows them to be even more prepared to survive after a disaster, because they become more flexible and responsive. Accordingly to their small-sized nature, SMEs are used to face challenges and aren't blocked by the bureaucracy or heaviness of a larger organization's process.

Often "robustness" is confused with "resilience". If robustness is a concept used to describe a firm that did not have to change a lot, it has not been scratched by the sudden events because it is very solid and able to remain steady. In resilience, in contrast, the key

¹⁴ Sullivan-Taylor & Branicki (2011), Creating resilient SMEs: why one size might not fit all., International Journal of Production Research, Vol.49

elements are flexibility and adaptability; resilient enterprises are able to face events, absorb new challenges and shape, as a consequence, into a new frame, i.e. a diverse stable state. Author of *The Black Swan*, Nassim Nicholas Taleb, used a different word to define what we consider the modern resilience in his *Antifragile: Things That Gain From Disorder* book, but with a similar meaning. Taleb talks oppose "fragile" systems not to "robust", but to "antifragile" systems. In this case, the *anti-fragile* system, not only faces and absorbs challenges deriving from crisis, but it also benefits from it, exactly as resilience does in SMEs.

Table 4 - Advantages and Challenges for Being SMEs

ADVANTAGES	CHALLANGES
Founder's vision and commitment	Financial constraint and raising capital
Entrepreneurial drive	Limited human and non-human assets
Innovative ideas	Recruiting competent employees
Niche market	Inspiring new stakeholders
Speedy move	Lack of pass-test routines
Flexibility	Lack of prior international experiences
Adaptability	Management capabilities
Responsiveness to problems	Lack of scale and efficiency as large MNEs
Low-cost production or service	Liability of newness
Less organizational bureaucracy	Finding reliable suppliers and partners
Less visibility	Government bureaucracy
Institution facilitation	Entry barriers

Source: (Yang, 2012).

Being a SME has many advantages, as displayed by Table 3, but also a number of challenges to compete with larger enterprises (Yang, 2012). Moreover, all these characteristics, from the innovativeness, to the flexibility or the absence of management capabilities can be the reason why they are less vulnerable to sudden changes than large corporations, drawing upon the ideas of Taleb¹⁵, and that networks of SMEs may contribute to the overall resilience of society if certain criteria are met (Dahlberg & Guay, 2015).

In the analysis of the relationship between resilience capabilities and the strengths and weaknesses associated with the SME sector, Sullivan-Taylor & Braniki (in their *Creating resilient SMEs: why one size might not fit all, 2011*) have focussed upon "the financial, physical, human, and organisational assets used by a firm". They used the Weick and

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¹⁵ For further information consult: Taleb, N. (2012). *Antifragile: Things That Gain From Disorder*. United States: Random House. Taleb, N. (2007). *The Black Swan: The Impact of the Highly Improbable*. United States: Random House.

Sutcliffe (2001) four-category framework to help SME in assessing their own perceptions about organisation's existing capabilities to cope with extreme events. *Resourcefulness*: is the first category and is considered by SMEs a key barrier to resilience; it involves the capability of managers of identifying potential problems, establishing priorities and mobilising resources to avoid damage or disruption. *Technical systems*: were not a key focus for SMEs; the ability of managers to ensure that organisational systems perform to high levels when subject to extreme stress. *Organizationally*: managers tend to talk about 'muddling through' (try to find a solution during the crisis, do not be proactive before the crisis starts) as a typical way of SMEs' approach, in this case there is a lack of competence of managers to make decisions and to take actions to reduce disaster vulnerability and impacts. *Rapidity*: SMEs have a positive potential for timeliness and agility, rapidity in practice, and the capacity of managers to make decisions under pressure without excessive delay.

The Local Economic Snapshot is an example of analysis of SME perceptions of, and responses to, recession. This is only one clear example of the consequences deriving from the crisis. In spite of the concrete economic and financial effects of the recession, what is important to mention is the attitude of SMEs, deriving from the perception of market conditions and opportunities uncontaminated by growth rate and statistics. This analysis 16 was undertaken throughout a bi-monthly survey in the English counties of Lincolnshire and Rutland that generated eleven sets of responses, which represent two years of data from July 2010 to May 2012. SMEs were asked to specify their range of agreement with the question: Is the recession over for my business? (Price, Rae, & Cini, 2013). This question was asked to explore confidence in the national economy and to understand whether SMEs identified with the timescale of the UK recession as defined using national GDP growth data. Throughout the period of the survey, the proportion of businesses that agreed with this statement remained below 20%. Even if in 2010 the percentage of firms that felt the recession was over was around 19%, the trend in 2011 and 2012 was negative, falling to 6% in May 2012. Views on trading conditions showed a more erratic pattern during the two-year period, increasing from 29% in July 2010 to 39% in March 2011, and decreasing to 23% in May 2012. Comparing the two measures, the amount of businesses that perceived trading conditions were improving was consistently higher than the amount of those that consider the recession was over.

¹⁶ The *Local Economic Snapshot* was being chosen for its clearness and simplicity of comprehension.

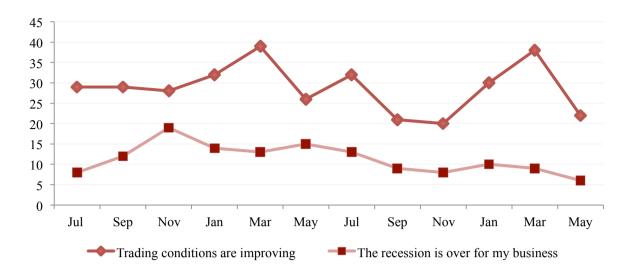


FIGURE 3 - PERCEPTIONS AND RESPONSES TO RECESSION

Source: (Price, Rae, & Cini, 2013).

1.4.3. Innovation and role of the Entrepreneur

While speaking about recovery strategies for SMEs, as we have already seen, it is fundamental to consider the importance of innovation and entrepreneurship. According to Schumpeter, in *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle* (1934), in the economic development the entrepreneur is seen as the innovator, and many studies have indicated him as the fundamental actor, agent of change, and source of creative destruction through economic implementation of other inventions. The relevance of innovativeness is related to profitability of small and medium-sized enterprises based on it, in which the entrepreneur is the human being who entails all positive characteristics of flexibility and newness proper of SMEs and start-ups (Cordeiro & Vieira, 2012). Nonetheless the issue of innovativeness presents also many barriers, to the extent of successful innovative organizations (Tidd & Bessant, 2009) or in the constraints that inhibit innovation itself (Hadjimanolis, 2003): lack of time and funding, resistance to change, lack of key competences, and hindering government regulations. However, historically, the definition of entrepreneurship has been always related to creativity and innovation, especially in the capability of gaining or increasing under risk and uncertainty (Dollinger, 2003).

Similarly, Miler (1983) conceptualized the focal dimensions of EO ¹⁷ as innovativeness, risk-taking, proactiveness, competitive aggressiveness and autonomy. Also in this case, innovativeness is not the only feature that characterises the entrepreneur; risk-taking must be highlighted as a primary tool for a small firm to survive, and, if we discuss about innovative SMEs, proactiveness and competitive aggressiveness cannot be excluded. As far as autonomy is concerned, SMEs are driven by entrepreneurial orientation but sometimes autonomy can become a weakness in the availability of resources, and, in order to face these challenges, partnerships and collaborations are taken into account. Even assuming an important role "Entrepreneurship is not merely an economic process but draws from social context which shapes and forms entrepreneurial outcomes" (Jack and Anderson, 2002). Accordingly, many authors refers to the concept of embeddedness because they argue that the entrepreneurial activity must be sustained by the social context, particularly the local environment, and this concept underlines the importance of the influence of social factors (Duarte, 2004).

Studies have devoted considerable attention to the connection between entrepreneurship and the unique characteristics of SMEs. Yang (2012) analysis focuses on both commonalities and distinctions among individual entrepreneurs regarding their motives and predispositions to start new ventures, to follow a stage model towards gradual internationalization, or to embark as born global. In his paper a framework is created in order to delineate all features of a context in which the entrepreneur must take strategic decisions.

SMEs and small family businesses embark, operate, adapt, compete on resources and capabilities, and exploit market opportunities in a dynamic cross-cultural context, portrayed below. What Yang tries to show are the key factors and capability of adaptation an entrepreneur must have to face the socioeconomic variations that are essential for small business survival and success, whether they are more domestically focused or moving towards higher levels of global participation.

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¹⁷ EO: Entrepreneurial Orientation.

NATIONAL CONTEXT GLOBAL INTELLIGENCE Supply of human resources Socioeconomic changes Financial infrastructures Geographical features Free market orientation Institutional reforms Regulatory institutions Economic analysis Cultural analysis Educational system Economic climate Market analysis Cultural values Legal analysis **SMALL AND FACILITATING** (Sequential vs. Born global) **FAMILY BUSINESS NETWORKS** GLOBAL STRATEGIES Entrepreneurial drive Family and friends International suppliers Global market orientation Individual mentors Strategic alliance Human and nonhuman assets Trade associations Franchising Organizational capabilities Business advisors Licensing Management process Social networks Exporting Founder's vision The Internet FDI SURVIVAL AND SUCCESS Growth Innovation Financing Internationalization Harvest and exit

FIGURE 4 - A GLOBAL STRATEGIC FRAMEWORK FOR ENTREPRENEURS AND ENTREPRENEURIAL FIRMS

Source: adapted from (Yang, 2012).

There are two major streams of research on the process of internationalizing SMEs, which are also relevant for small family businesses. One is a *stage-by-stage learning and adaptation model*, and the other is *a born-global model* such as global start-ups that have attempted to do business across borders since their beginning. The traditional view follows the sequential process, commonly known as the stage model that takes an incremental approach to the SME internationalization (Johnson & Vahlne, 1977). From the resource-based perspective of entrepreneurship, the sequential course that leads from a domestic focus to a global market orientation is a learning process, whereby knowledge of the new markets is acquired, firm capabilities are developed, and resources are increasingly committed to opportunities beyond the national boundaries. To minimize the risks, firms with little prior international experiences are more likely to begin their international expansion from similar markets that are more culturally and geographically close to their own, rather than choosing sharply unfamiliar markets. The stage model of internationalization entails a slow, stage-by-

stage process. The current state of research suggests that the sequential process of internationalization is more appropriate in mature industries where the environmental changes are minimal, whereas in fast growing industries, the born-global model provides a better understanding of rapid internationalization of small businesses (Andersson & Wictor 2003).

In both cases the Entrepreneur embodies the decision maker for all the variables taken into consideration in the previous figure. If considering innovative SMEs or start-ups, nowadays the trend reveals a propension to a born global strategy because of the necessity to compete in a global market. After crisis scenario gives the opportunity to new ventures to face a larger market in which create their own niche, and often, being smaller and more flexible becomes an advantage for the purpose.

The 2015 Global Entrepreneurship Monitor (GEM) is the 17th annual global survey of entrepreneurial activity taken by universities across the globe¹⁸. It considers multiple phases of the business process; the characteristics, motivations and ambitions of entrepreneurs; the attitudes societies have toward this activity; and the quality of entrepreneurship ecosystems in different economies. It is an important example of the role of the entrepreneurship in the economic development of a country compared to the others. The importance of the entrepreneur, as the engine of the economic growth (Ayyagari, Demirguc-Kunt, & Maksimovic, 2011) and the representation of innovativeness (Schumpeter, 1934) was implemented in the GEM survey in order to collect data on the self-perceptions about entrepreneurship, phases and types of entrepreneurial activity, age and gender distribution, and industry sector participation. Sixty-two economies were involved in the 2015 survey¹⁹.

The GEM survey was conceptualized with regard to the interdependency between entrepreneurship and economic development, in order to:

- Uncover factors that encourage or hinder entrepreneurial activity, especially related to societal values, personal attributes and the entrepreneurship ecosystem;
- Provide a platform for assessing the extent to which entrepreneurial activity influences economic growth within individual economies;

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¹⁸ Babson College, Babson Park, MA, United States; Universidad del Desarrollo, Santiago, Chile; Universiti Tun Abdul Razak, Malaysia; Tecnológico de Monterrey, Mexico; London Business School, London, United Kingdom.

¹⁹ For a detailed table on the countries involved in the 2015 GEM survey see **Annex II**.

• Uncover policy implications for the purpose to enhance entrepreneurial capability in an economy.

The 2015/16 report features a detailed review of key entrepreneurship indicators, representing a comprehensive set of measures that collectively contribute towards the impact entrepreneurship has on a society and to what extent society supports this activity.

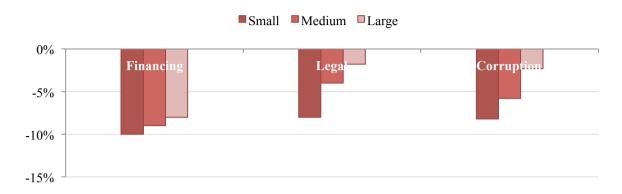
1.4.4. Financing point of view

Relevance of SMEs' study before the financial crisis is a consequence of the percentage of employment they already constituted in many countries, back when no one would have imagined such a recession (Beck, Demirguç-Kunt, & Levine, 2005). Many scholars have studied so far the possible links among SMEs, economic growth, and poverty alleviation. As an example, the World Business Environment Survey (WBES) is a unique firm-level survey conducted in 1999 and 2000 by the World Bank for over 10,000 firms in more than 80 countries. A database has been constructed through surveys and provides information on the obstacles as perceived by the firms on actual possibilities to grow. Furthermore, Beck et. al has provided cross-country evidence of linkages between SMEs and economic growth in 2005 using Ayyagari et. al (2002) firm-level survey-based database. Their study is a pre-crisis example to explore firm-differences within specific countries, but also to compare firms across countries and link differences to country characteristics such as financial and institutional development in order to clarify which were the main financing constraints that a small and medium-sized enterprise had in that period. Less access to external finance and constraints in operation and growth resulted to be the most important features regarding small firms in both developing and developed countries (Berger and Udell, 1998; Galindo and Schiantarelli, 2003). Small and medium-sized enterprises, with demand for smaller loans, faced two major problems: higher transaction costs and higher risk premiums due to the fact that they are characteristically more opaque and can offer less guarantees.

Beck *et al.* (2005) find that large firms' financing obstacles had almost half the effect on annual growth than small firms' financing obstacles did. This gap between the two subjects of analysis was even bigger if related to the legal system or to corruption, where small firms suffered more than three times as much in the form of slower growth as large firms.

This relationship among different sizes of firm in the field of constraints is highlighted in the graph below.

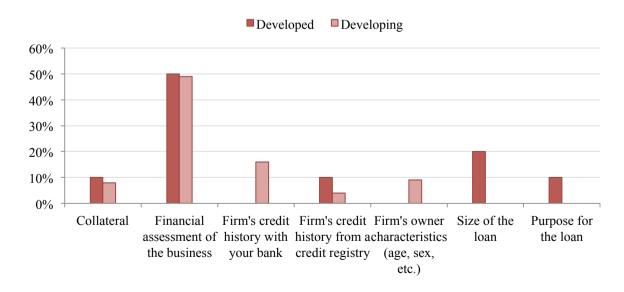
FIGURE 5 - GROWTH CONSTRAINTS ACROSS FIRMS OF DIFFERENT SIZES BEFORE THE CRISIS



Source: Beck, Demirguç-Kunt, & Levine, SMEs, Growth, and Poverty: Cross-Country Evidence, 2005.

Young and small firms dependency on external finance for growth and maintenance is related to their size. The vast majority of SMEs financing derives from bank credit and, despite the presence of important alternative ways of funding, the traditional relationship with an exclusive bank is the most used source of finance by European SMEs (Petersen and Rajan, 1994; Sapienza, 2002). A study conducted on 91 banks in 45 countries by Beck, A. Demirguç-Kunt, and M.S. Martínez Pería (2008) highlights the main factors taken into account by banks when deciding to finance SMEs.

FIGURE 6 - CRITERIA USED BY BANKS TO EVALUATE SMES BEFORE THE CRISIS



Source: Beck & A. Demirguç-Kunt, Banking SMEs around the world: Lending practices, business models, drivers and obstacles, 2008.

The study's results have been divided into banks of developed and of developing countries. In the developed world the financial assessment of the business is vastly the main focus of such an evaluation of SMEs requirements, with the specifications concerning the particular loan. But, in the developing countries' banks, the authors have found a relevant importance in credit history and owner characteristics, which underline the importance of the single relationship in a long-term point of view. The main focus of the bank-SME relationship often tends to depend on short-term financing, which explains SMEs liquidity constraints during crisis periods. Small businesses, and particularly young small businesses, have little internal cash flow to finance their operations.

"Lending to these types of firms often requires banks to demand collateral. Hence, insufficient collateral is a major reason for banks refusing to grant additional loans to such companies. At the same time, access to finance for SMEs is often limited by the imperfections and constraints of supply and demand of credit. During a time of financial crisis where their capacity to invest depended generally on banking loans, SMEs cannot finance their projects."

PAULET, E., PARNAUDEAU, M., ABDESSEMED, T., 2014

The financial crisis was particularly severe and showed its effects on OECD economic output in 2008 and 2009 in most developed economies, and in many European countries this was followed by a sovereign debt crisis. Between 2009 and 2013, however, GDP growth rates generally increased, even though this positive trend was uneven in the countries involved. The OECD "Financing SMEs and Entrepreneurship scoreboard" (2016) depicts a positive trend registered in 2014-2015 and forecasted for 2016. Japanese economy contracted only by 0.1% in 2014, while USA and UK remained stable, and, at the same time, this year was a turning point for the Euro area, showing a growth of 0.9%. As a result of slow growth in Europe, the pace of growth in emerging economies such as China, Colombia or Turkey decelerated significantly in 2014, compared to the pre-crisis scenario.

Financial conditions have changed markedly since 2007: weak economic growth, along with the instability and weakening of many financial institutions, exerted a severe negative impact on bank lending, in particular for SMEs for the majority of participating countries (Albertazzi and Marchetti, 2010; Iyer *et al.*, 2010; Jimenez *et al.*, 2011). Credit standards have tightened dramatically since the crisis and lending has contracted, often considerably. As weak demand often limited internal funding, and many non-bank sources of finance also dried up in 2008 and 2009, access to finance significantly impacted many SMEs' ability to grow, innovate and provide jobs.

The data on SME loans have illustrated very divergent trends among the Scoreboard countries and documented an uneven and often weak recovery (OECD, 2016). The picture regarding SME loans in 2014 is mixed, even though in most countries a general recovery in economic growth and favourable financial conditions has been registered. 11 countries experienced negative growth in SME lending in 2014 (Belgium, Canada, Czech Republic, Ireland, Italy, Portugal, Russian Federation, Slovenia, Switzerland, United Kingdom, and United States), and 16 registered an expansion (Australia, Chile, Colombia, Estonia, France, Georgia, Greece, Ireland, Israel, Japan, Korea, Malaysia, New Zealand, Serbia, and Turkey). Loan growth in 2014 surpassed 2013 levels in a majority of countries. However, bank financing is not always well suited to SMEs, especially innovative firms or start-ups, and it is better fitted to large established enterprises needs (Artola and Genre, 2011; Canton *et al.*, 2012; Holton *et al.*, 2011; Popov and Udell, 2010).

It is, therefore, important for small and medium-sized enterprises to be able to access a broad range of financing instruments. Given the difficulties experienced by SMEs in the last years, they have adopted new techniques of financing, for example the *Crowdfunding*²⁰. Massolution, an advisory and research firm, estimates, on a basis of 1250 active Crowdfunding platforms, that Crowdfunding volumes increased by 145% between 2013 and 2014 in North America to USD 9.46 billion; in Asia by 340% to a volume of USD 3.4 billion; in Europe by 141% over the same period reaching volumes of € 3.26 billion. Crowdfunding became very popular in recent years as a fund to SMEs all over the world, but it must be noted that more than half of entrepreneurial ventures that gain from this activities consist of non-profit, social or artistic causes and real estate activities (OECD, 2016).

Between 2007 and 2013, the interest rate spread between large firms and SMEs amplified significantly for most Scoreboard countries for which data are available, with the exception of Belgium, Canada, Colombia, Korea, Serbia, Sweden and the United States. In Denmark, Hungary, Ireland, Italy, Spain and New Zealand, the interest rate spread extended by more than 100 basis points over this period (OECD, 2016). This implies that the less favourable conditions of lending to SMEs has got worse since the crisis, accordingly SMEs has become perceived as a more risky subject to lend to. Banks have interpreted the fall in

²⁰ Crowdfunding is a financial technique to raise external finance from a large audience, rather than a single or a small group of specialised investors, whereby each individual provides a small amount of the funding requested. An Internet platform is typically used to match investors with business and other ventures seeking finance (OECD, 2015).

both domestic and foreign demand of the last years as a more averse and uncertain environment where lending, especially with regard to less creditworthy debtors.

Innovative small ventures face the greater difficulties to obtain finance (Freel, 2007; Schneider & Veugelers, 2010; Hutton & Lee, 2012; Mason, 2013; Mina *et al.* 2013) because they tend to have riskier business models, which are the starting point for new market-creation but are also difficult for banks to assess (Paulet, Parnaudeau, & Abdessemed, 2014). This problem of uncertainty may be particularly acute for SMEs who lack the scale to invest in multiple projects (Freel, 2007); large firms, instead, are able to field more diverse portfolios. Considering the standard risk assessment measures used by banks, SMEs were, on average, more risky investments than before the crisis; according to Fraser (2009), the percentage of high risk SMEs increased from 4.4% to 21.7% between 2004 and 2008 (Ardic, Mylenko, & Saltane, 2012).

1.4.5. SMEs' job creation

The role of SMEs in employment was considered marginal until proven otherwise by Birch's "The job generation process" (1979); before that, large firms were historically considered as the major, and sometimes the only, significant driving force for the growth of employment in the modern era. In this work, Birch constructed a study on the data from 6 million US businesses and discovered that, in the first half of 1970s, 67% of total employment US growth was due to firms with less than 20 employees (Birch, The job generation process, 1979). In his later work, based on 12 million businesses, the author underlined the impact of SMEs on employment but highlighted also the important contribution by innovative or, anyway, dynamic and young small enterprises (Birch, Job creation in America: How our smallest companies put the most people to work, 1987).

"SMEs [...] constitute 99.8% of all businesses in the European non-financial business sector (Muller et al., 2015). In 2014, these 22.3 million companies accounted for 67% of total employment and contributed considerably to job growth despite employment in the EU being 1.3 percentage points below the 2008 level."

EUROPEAN COMMISSION, 2015

In the following decades, Birch's findings were confirmed by the worldwide research on the relation between firm size and job creation (Stangler, 2009; Haltiwanger, Jarmin, & Miranda,

2013; Neumark, Wall, & Zhang, 2011) and gave rise to a debate on the role of SMEs and entrepreneurship in employment rate (Ayyagari *et al.*, 2011; De Kok *et.al*, 2013; Bravo-Biosca, 2010; Fort *et al.*, 2013; Romero, 2011; Stuky, 2013). The first cross-country analysis, completed at least for OECD countries, considering heterogeneous types of firms, was only undertaken in the 2000s; this late approach to a mixed enterprises study was due to the difficulties in having access to various business-level data involving different countries. In 2013 the ILO²¹ commissioned a paper on Job creation that explored the number of jobs provided by SMEs around the world, examined the potential of SMEs to generate new jobs (differentiating between three levels of aggregations: job creation at the level of size classes, at the level of individual enterprises and at country level), and considered various aspects of job quality, such as decent earnings and job security (De Kok, Deijl, & Essen, 2013). A more detailed study, which accompanies the 2015 SME Annual Report, has been published by the European Union last year; it provides a full analysis of employment creation and destruction by SME in the EU28 over the period 2007-2014 (European Commission, 2015).

According to the *Annual EU Report*, SMEs began finally to outperform established enterprises, for what concerns job creation, only in 2014. Micro, small and medium enterprises accounted disproportionally to the reduction in total SME employment from 2008 to 2013. Micro firms decline share in SME jobs is incredibly high, 60%, considering its responsibility of only 44% of total SME employment. Small enterprises, instead, accounted for a smaller share of decrease considering its importance in the SME category. The overall change in employment between 2008 and 2014 depended on micro enterprises for 77.8%, small enterprises for 7,2% and medium enterprises for 15%.

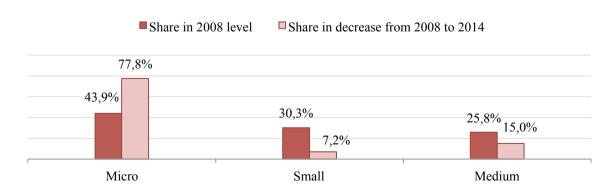


FIGURE 7 - CHANGE IN EU28 SME EMPLOYMENT BY SME SIZE CLASS IN 2008-2014

Source: Eurostat, National Statistical Offices; (European Commission, 2015).

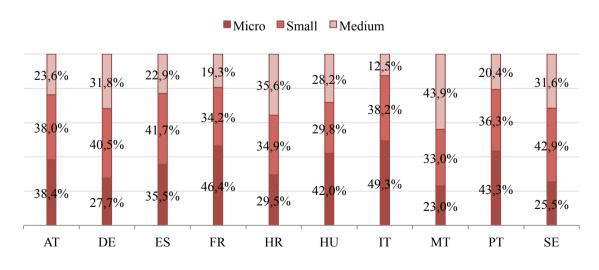
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²¹ International Labour Organization.

While speaking about employment creation, net and gross definitions should be distinguished in order to contemplate also job destruction. Gross employment creation is referred to the number of jobs created by SMEs in a certain period in spite of the number of jobs lost is the gross employment destruction. As a result, net employment is the difference between gross employment creation and destruction; accordingly, if the result is positive it will be called net employment creation, in contrast, if it is negative it will be called net employment destruction. Net employment creation/destruction can be referred to different groups of SMEs, the whole population of small and medium-sized enterprises, a particular size, SMEs of a specific sector, etc.

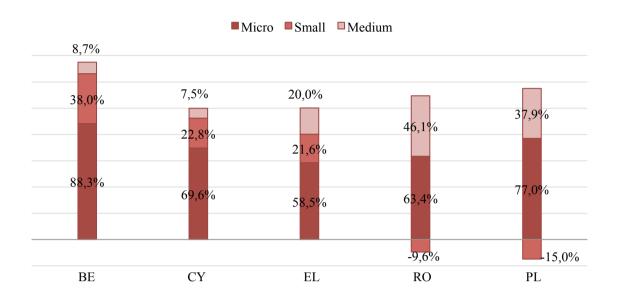
SMEs of different size contribute disproportionately to net job creation among EU Member States. As the graphs below describe, micro firms accounted for nearly all the net employment creation in Belgium, and approximately the half in France; in contrast, Cyprus, Greece, Poland, and Romania net employment destruction was due precisely to micro firms. In Denmark, Finland, Ireland, Latvia, and the Netherlands overall reduction of SME employment was mostly accounted for small sized firms that are the main contributors of job creation in Germany, Luxembourg, Sweden, and the United Kingdom. On the contrary, medium-sized SMEs are the main contributors of net job creation in Malta while they are also the most important contributor of negative change in employment in Bulgaria, Czech Republic, Estonia, Lithuania, and Slovenia.

 $\frac{\text{Figure 8 - Net Change in Employment from 2008 to 2014}}{\text{CLasses}} - \frac{\text{Even Contribution of Size SME}}{\text{Classes}}$



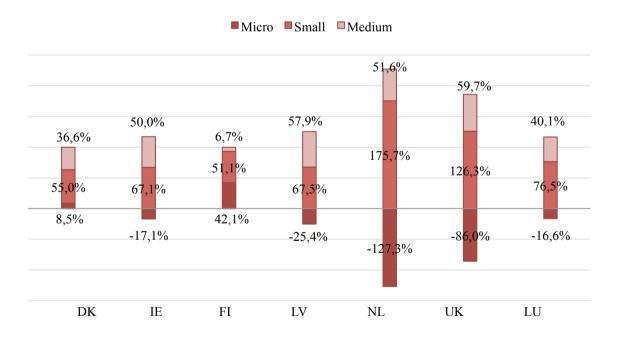
Source: Eurostat, National Statistical Offices; (European Commission, 2015).

 $\frac{\text{Figure 9 - Net Change in Employment from 2008 to 2014}}{\text{More than 50\% of Net Employment Positive Change}} \\ - \frac{\text{Micro Sized firms account for 2008 to 2014}}{\text{More than 50\% of Net Employment Positive Change}} \\ - \frac{\text{Micro Sized firms account for 2008 to 2014}}{\text{More than 50\% of Net Employment Positive Change}} \\ - \frac{\text{Micro Sized firms account for 2008 to 2014}}{\text{More than 50\% of Net Employment Positive Change}} \\ - \frac{\text{Micro Sized firms account for 2008 to 2014}}{\text{More than 50\% of Net Employment Positive Change}} \\ - \frac{\text{Micro Sized firms account for 2008 to 2014}}{\text{More than 50\% of Net Employment Positive Change}} \\ - \frac{\text{Micro Sized firms account for 2008 to 2014}}{\text{More than 50\% of Net Employment Positive Change}} \\ - \frac{\text{Micro Sized firms account for 2008 to 2014}}{\text{More than 50\% of Net Employment Positive Change}} \\ - \frac{\text{Micro Sized firms account for 2008 to 2014}}{\text{More than 50\% of Net Employment Positive Change}} \\ - \frac{\text{Micro Sized firms account for 2008 to 2014}}{\text{More than 50\% of Net Employment Positive Change}} \\ - \frac{\text{Micro Sized firms account for 2008 to 2014}}{\text{More than 50\% of Net Employment Positive Change}} \\ - \frac{\text{Micro Sized firms account for 2008 to 2014}}{\text{More than 50\% of Net Employment Positive Change}} \\ - \frac{\text{Micro Sized firms account for 2008 to 2014}}{\text{More than 50\% of Net Employment Positive Change}} \\ - \frac{\text{Micro Sized firms account for 2008 to 2014}}{\text{More than 50\% of Net Employment Positive Change}} \\ - \frac{\text{More than 50\% of Net Employment Positive Change}}{\text{More than 50\% of Net Employment Positive Change}} \\ - \frac{\text{More than 50\% of Net Employment Positive Change}}{\text{More than 50\% of Net Employment Positive Change}} \\ - \frac{\text{More than 50\% of Net Employment Positive Change}}{\text{More than 50\% of Net Employment Positive Change}} \\ - \frac{\text{More than 50\% of Net Employment Positive Change}}{\text{More than 50\% of Net Employment Positive Change}} \\ - \frac{\text{More than 50\% of Net Employment Positive Change}}{\text{More than 50\% of Net Employment Positive Change}} \\ - \frac{\text{More than$



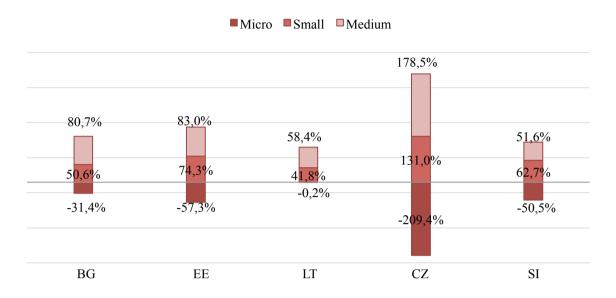
Source: Eurostat, National Statistical Offices; (European Commission, 2015).

 $\frac{\text{Figure 10 - Net Change in Employment from 2008 to 2014}}{\text{More than 50\% of Net Employment Positive Change}} \leq \frac{\text{Small sized firms account for More than 50\% of Net Employment Positive Change}}{\text{More than 50\% of Net Employment Positive Change}}$



Source: Eurostat, National Statistical Offices; (European Commission, 2015).

 $\frac{\text{Figure 11 - Net Change in Employment from 2008 to 2014}}{\text{for more than 50\% of Net Employment Positive Change}}$

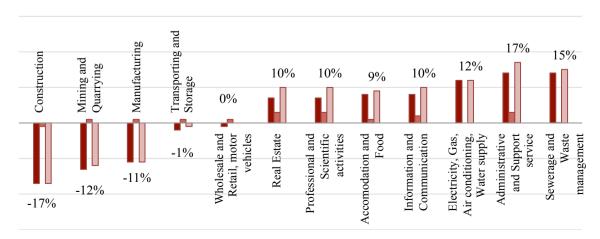


Source: Eurostat, National Statistical Offices; (European Commission, 2015).

SMEs of different size, as vastly represented before, contribute disproportionally to net job creation in different EU countries. The employment rate change can be measured not only among number of employees or SME sizes, but also considering other criteria, e.g. their role across different sectors.

 $\frac{\text{Figure 12} - \text{Growth rates of EU28 SME Employment By Economic Sector, 2008-2013, 2013-2014, and 2008-2014}{\text{2014, and 2008-2014}}$





Source: Eurostat, National Statistical Offices; (European Commission, 2015).

Construction, Mining and Quarrying, and Manufacturing account together for one third of total SME employment rate in 2014, in EU28; they also register the highest net employment destruction over the period 2008-2014 (fig. 12). In contrast, the three sectors with the higher (more than 10%) growth in net employment since 2008 are *Electricity*, Gas, Air Conditioning and Water supply, Administrative and Support service, and Sewerage and Waste management. Although the great increase, these sectors accounted for only 10% of SME employment. Real estate activities, Professional, Scientific services, Accommodation and Food services, and Information and Communication accounted for more than 25% of total SME employment and experienced a solid net job creation (European Commission, 2015). However, each of these sectors represents a group of important subcategories with substantial differences in terms of growth rate. Notably, *Professional and* Service sector consists of "Activities of head offices", "Consultancy", "Veterinary activities", "Scientific research & development" that accounted respectively for 20%, 14% and 14% of employment growth; but the same sector includes also 1% growth of "Architectural & engineering; technical testing and analysis" and 7% increase in "Legal and accounting", and "Other Professional, Scientific and Tech activities"²². The 2008-2013 period was negative, in terms of net SME employment, for a huge part of the non-financial industries. However, in the very consecutive year, almost all these sectors, with the exception of Construction, registered a positive trend from 1% to 3%, in contrast with the decline shown after the crisis in the EU28. The best performing sector was Administrative and support services activities, with an employment growth of 17%.

High export-propensity sectors registered higher net employment losses after the financial crisis, at the EU27 level. *Manufacturing of motor vehicles, trailers and semitrailers, Manufacturing of other transport equipment* and *Manufacturing of basic pharmaceutical products and preparations* are some examples of high or very-high export driven sectors; however, in Europe, the very minority of firms has these characteristics, accordingly, the highest percentage of SMEs is low or very-low export driven.

²² Detailed sector-level information on employment growth is provided in **Annex III** (III.1, III.2, III.3, III.4, and III.5).

Employment growth rate 2008-2013 Employment growth rate 2013-2014 Share of total SME employment in 2014 69% 25% 4% 1,3% 1,6% 1,6% 0,02% 0,9% 2% 0,1% -0.2% -3,2% -10,1% -10,9% Medium High Very Low Low Very High

FIGURE 13 – EU28 SME EMPLOYMENT PERFORMANCE BY EXPORT INTENSITY

Source: Eurostat, National Statistical Offices (European Union, 2015).

Modern literature on growth engines has devoted considerable attention to exports in the globalised macroeconomic picture, even though SMEs value added generated by export driven industries is very low. Then, "Why exports are so important in the economic performance evaluation in these years?" Firstly, two different export types must be highlighted: export to other EU countries, and export to destinations outside EU. In the period between 2008 and 2013, taking into consideration all firms of all sizes, the value of total exports inside Europe increased only of 14% compared to a 95% outside the continent. Secondly, in 2008, SMEs' and large enterprises' shares of extra-EU exports were nearly the same, 27,1% and 27,6% respectively. In contrast, by 2013, the percentages increased in a different way, despite a 33,3% increase in exports to markets outside EU for SMEs, large firms accounted for 43,7% increase of the total value of exports.

Furthermore, other two main aspects taken into account while analysing SMEs' job creation are *Technology and Knowledge intensity*. The knowledge feature refers to knowledge intensive services (particularly relevant in net employment creation) and less knowledge intensive services. Intensive micro-sized firms grew in employment by 9%, small-sized firms by the same percentage, and medium-sized firms by 10%.

Technology intensity, instead, refers to four types of industries, high tech, medium-high tech, medium-low tech, and low tech. Only the medium-low tech and low tech industries recorded positive, albeit limited, employment growth in 2014, while employment in high tech industry declined marginally, and remained broadly unchanged in high-medium tech industry. Among small and medium firms, the high-tech sector was the worst performer (-1%), while employment in medium-high and medium-low tech firms stagnated in 2014. Micro firms, however, recorded positive employment growth in all 4 types of technology intensity categories. Growth in the less-knowledge intensive services' SMEs was much more subdued (European Union, 2015).

2. The role of SMEs in the Italian Recovery

The Italian economic growth has been weak since more than one decade. The manufacturing sector, which has still an important role in the national GDP, however, has had a decreasing trend over the last years. Value added of the SME industry grew slightly between 2000 and 2007 and even contracted since 2008, only in 2010 Italian recovery seemed to start but in the following two years it registered another decline. The weakness of internal demand is one of the driven factors of such a slow recovery; moreover, even though exports in Europe represented a fundamental force for the euro-area growth, Italian firms found it hard to adapt to the new external context. A vast number of small enterprises reacted through dynamism, diversification and repositioning in the global value chain, but, on a macro-level, the scenario was lacking of R&D investments and innovation, that is mainly incremental²³, causing a scarceness of competitiveness (Assomac²⁴, 2014).

Italian famous districts have obviated the necessity of renovating, mostly for SMEs that have the great advantage of flexibility and less complex structure. In a period in which the value added of a product is strictly correlated not only to the mere production phase, but also, and more than ever, to activities that precede and follow it, micro enterprises (often based on family firms) find hard to innovate in terms of technology, design, marketing, commercialization, and costumer care. Most of the times, what lacks in these competitive renovating strategies is expertise and liquidity.

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²³ A *Radical or Disruptive Innovation* has a significant impact on a market and on the economic activity of firms in that market, while an *Incremental Innovation* concerns an existing product, service, process, organization or method whose performance has been significantly enhanced or upgraded (OECD & The World Bank, 2013).

²⁴ Assomac is the National organization of Italian machine and accessories builders for footwear, tanneries and leather goods.

2.1 ITALY AFTER CRISIS

The 99.9% of Italian enterprises is composed by SMEs and account for 80% of the industrial and service labour force (Eurostat, 2013). The vast majority of the sector is represented by micro-enterprises (95.9%) whose share is higher than the EU average (OECD, 2015).

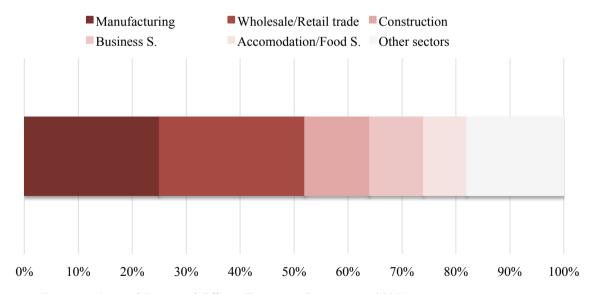
TABLE 5 - DISTRIBUTION OF FIRMS IN ITALY

		TOTAL ACTIVE ENTERPRISE		
		Number	%	
ALL FIRMS		4 460 891	100	
SMEs		4 457 205	99.9	
	Micro	4 279 176	95.9	
	Small	156 996	3.5	
	Medium	21 033	0.5	
LARGE (250+)		3 585	0.1	

Source: Istat, 2012.

Furthermore, in Italian SMEs, value added varies markedly across different sectors, as highlighted below in the graph *Manufacturing* has the major percentage of value added created, followed by *Wholesale and Retail Trade* (European Commission, 2015).

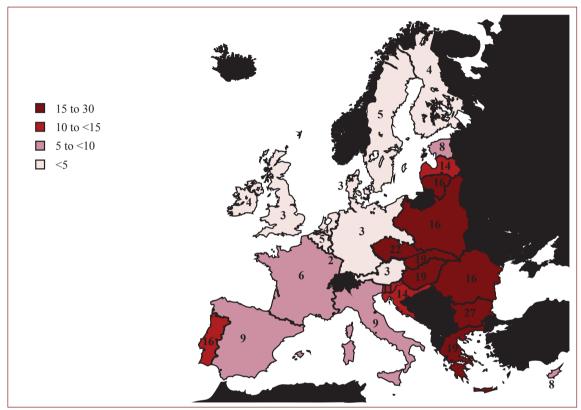
FIGURE 14 - ITALIAN SMES VALUE ADDED AMONG DIFFERENT SECTORS



Source: Eurostat, National Statistical Offices (European Commission, 2015).

In Italy, SMEs are the engine of economic trends, and account for nearly the same share of the overall number of firms in the EU Member States; however, their contribution to the economic value added varies markedly among all of them. Central European countries are characterised by a higher number of SMEs per EUR million of value added compared to other countries, in particular Western European countries (European Union, 2015).

FIGURE 15 - NUMBER OF SMES PER EUR MILLION OF VALUE ADDED IN THE NON-FINANCIAL BUSINESS SECTOR ACROSS EU MEMBER STATES IN 2014



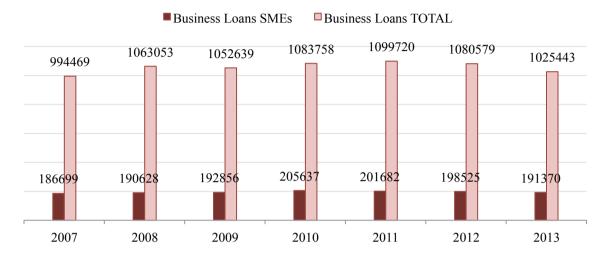
Source: Eurostat, National Statistical Offices (European Commission, 2015).

2.1.1. <u>Credit conditions</u>

The after crisis scenario in Italy was characterised by a recession that severely undermined the national banking system; in order to mitigate it, the strategy adopted was oriented more towards direct lending than to transactions on capital markets. After a period in which the economy seemed to recover, the situation collapsed into a new recession in 2011 because of the constant sovereign debt market pressures that compromised the banks' capacity to raise funds on wholesale markets (OECD, 2015). Domestic activities were affected by the crisis in particular the industrial production contracted by 25% over the period. SMEs sectors relied less on external demand and, for this reason, largely accused the

decrease in domestic demand. In 2009 total business loans declined in absolute terms and, in the two years which followed, it experienced a transitory improvement, although in 2012 and particularly in 2013 they declined sharply again.

FIGURE 16 – SMES' LOANS AND TOTAL BUSINESS LOANS IN ITALY



Note: Annual, in EUR million.

Source: Bank of Italy (European Commission, 2015).

While the credit to SMEs continued to grow throughout the first recession, even though the economic responses were weak, during the second downturn, that hit the economy in mid-2011, the credit decrease was tougher for SMEs than for larger enterprises because of the perception of insecurity smaller firms gave.

"The lending dynamics reflected, to a large extent, the perceived riskiness of borrowers: years of weak economic conditions caused a sharp deterioration in firms' profitability and weighted on their financial buffers."

EUROPEAN UNION, 2015

The European Union analysed the whole period between 2007 and 2013, for what concerned the share of SMEs loans and deduced that it actually remained stable (between 18% and 19% of all business loans); however, it must be considered that large companies had, and still have, easier access to alternative sources.

As a consequence, in a period in which the drop in bank credit was worsening, large firms were able to balance their finances by issuing debt securities, whereas most SMEs were heavily relying on bank lending. SMEs lending conditions tightened and credit demand from firms shrank. The share of long-term SMEs loans in total short and long-term SMEs loans declined from 31.6% in 2007 to 22.0% in 2013.

Long-term Loans (SMEs) ■ Short-term Loans (SMEs) 68,4% 70,4% 73.2% 75.7% 76.4% 76,6% 78% 31,6% 29,6% 26,8% 24 23,6% 23.4% 2007 2008 2009 2010 2011 2012 2013

FIGURE 17 – SHORT-TERM AND LONG-TERM SMES LOANS IN ITALY

Source: Bank of Italy (European Commission, 2015).

Figure 18 shows the credit conditions in Italian bank's credit standards in the field of approving loans comparing the situation between SMEs and large firms; the study is presented by the *Bank Lending Survey*²⁵ (BLS). Both types of firms suffered for severe contractions in credit conditions from 2007 to 2014. Italian banks participating to the survey indicated "behaviour influenced by the confusion in the financial markets" in mid-2007 and the failure of *Lehman Brothers* in the autumn of 2008, and highlighted a contraction of the criteria applied for loan authorisations.

"During the second half of 2011, the tensions on the sovereign debt market were reflected in a progressive reinforcing of lending standards mainly due to banks' fund-raising difficulties and worsened liquidity position."

EUROPEAN UNION, 2016

In 2012 the tensions were released, thanks also to the refinancing operations of ECB²⁶, even though credit standards haven't displayed an enhancement since then. The effects of the recession on credit quality were reflected in tight credit standards up to and including April 2014 (European Union, 2016).

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²⁵ The survey, started in January 2003, was conducted by the national central banks of the countries that have adopted the single currency, in collaboration with the European Central Bank, and was addressed to the senior loan officers responsible for credit policies of the main banks of the euro area (over 140). Eight credit groups are involved in Italy.

²⁶ European Central Bank.

Loans to SMEs Loans to large enterprises 0,7 0,6 0,5 0.4 0,3 0,2 0,1 0 -0,1January anuary anuary 2007 2008 2009 2010 2011 2012 2013 2014

FIGURE 18 - CREDIT CONDITIONS FOR SMES AND LARGE FIRMS IN ITALY, 2007-2014

Note: net percentages.

Source: The euro area Bank Lending Survey (European Commission, 2015).

Between 2008 and 2009 SME interest rates declined from 6.3% to 3.6%. Interest rates increased again during the progression of the financial crisis and the tougher effect was much more pronounced for SMEs than for large firms: "At the end of 2012, the average SME rate stood at 5.6%, and the average interest rate for large firms at 3.8%" (OECD, 2015). In 2013 the situation slightly improved by 0.2 percentage points for small and medium-sized enterprises' interest rate. Even if the interest rate for large firms declined, it is important to underline that the spread between the two increased and reached the highest level since the beginning of the crisis. As a result, it is easy to confirm that the Banks approach on loans pricing was driven by risk discrimination towards SMEs. Collateral requirements also decreased in the period between 2008 and 2009, and were followed by the lowering of the Central Credit Register²⁷ reporting limits and the inclusion of small, less secured loans. Nevertheless, between the end of 2010 and 2012 the request of guarantees increased. Accordingly, in 2013, 56.6% of bank loans were collateralised.

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²⁷ The Central Credit Register is an information system on the debt of the customers of the banks and financial companies supervised by the Bank of Italy. The Bank of Italy collects information on customers' borrowings from the intermediaries and notifies them of the risk position of each customer vis-à-vis the banking system (Banca d'Italia, 2016).

The ECB's Survey on the access to finance of SMEs in the Euro-area confirm this finding: the investigation analysed both 2013 and 2014 for what concerns guarantees and even comparing the same period of different years their request increased. At the same time credit quality worsened even further and the ratio of new bad debts to outstanding loans rose significantly (Soana, Verga, & Gandolfi, 2013).

Another example of the credit conditions affecting SMEs is given by the Rejection Rate²⁸, which rose at just 3.1% in 2007 and increased to 8.2% in 2008. In 2009 and 2010, as the economy recovered slightly, the number of rejections saw a decline. However, in 2011 the Rejection Rate rose again, reaching a peak of 12% due to the renewed economic downturn. Only few years later, data displayed an improved situation with a contraction of rejections at 8.3% in 2013, however, the number remained almost three times higher than in 2007 (OECD, 2015).

As a consequence of sever factors, such as the fall in sales and the tightening of credit conditions, SMEs then started to display also cash flow problems, which caused an increase in payment delays. Their trend, for both large firms and SMEs, reflects fluctuating tendency of the financial global crisis. Accordingly, payment delays peaked in 2009, followed by a downward trend for two years, and increased again in 2012. 2013 saw a rise in payment delays for SMEs (at 18.6 days) and a stabilisation for large enterprises (22.6 days).

TABLE 6 - PAYMENT DELAYS IN ITALY, 2008-2013

		2008	2009	2010	2011	2012	2013
Average number of days of	SMEs	19,4	22,1	19	16,9	17,9	18,6
Payment delays	Large firms	26,2	27,1	22,1	21	23,5	22,6

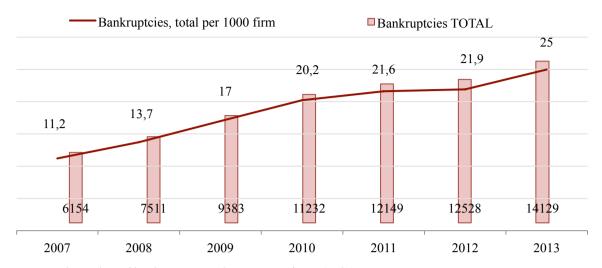
Sources: Cerved Group (European Commission, 2015).

One of the most effective indexes of the tragic consequences of the weak economic climate in which Italian economies operate, is given by the increased number of bankruptcies registered in 2007. Even if the economy slightly recovered since 2007, bankruptcies continued to intensify in these years as the graph below highlights.

²⁸ It is number of SMEs applying for credit that haven't obtained the requested amount in full.

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FIGURE 19 – TOTAL BANKRUPTCIES IN ITALY

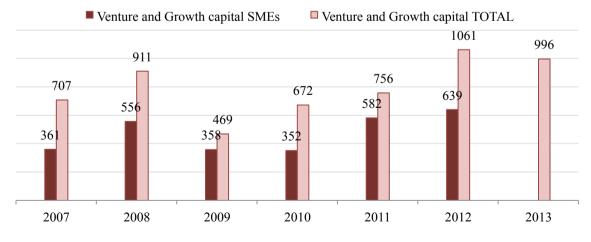


Note: Annual, number of bankruptcies and per 10 000 firms (right).

Source: Bank of Italy (European Commission, 2015).

Financial crisis repercussions on Italian economic environment are exemplified by the rate of both venture and growth capital, which dropped between 2008 and 2009 and recovered afterwards. "Although early stage venture capital is reserved for SMEs, it is interesting to note that expansion venture capital investments in Italy are often directed to large firms" (European Commission, 2015). While expansion capital investments in 2009 were largely directed to SMEs (70%), the percentage dropped to 48% in 2013, notwithstanding an important increase of investments in micro-enterprises in the same year.

FIGURE 20 – VENTURE AND EXPANSION CAPITAL INVESTED IN ITALY



Note: Annual, in EUR million.

Source: Bank of Italy (European Commission, 2015).

2.1.2. Government Support

Against the persistently weak economic conditions, several initiatives have been undertaken in recent years to favour SME access to credit and support their increasing liquidity needs. The uncertainty about economic recovery has suggested the introduction of new support measures.

The Central Guarantee Fund²⁹ (CGF) facilitated SME access to credit by providing public guarantees and counter-guarantees that could be requested by banks or financial companies. Active for more than a decade during the crisis the CGF represented the chief instrument aimed at easing SME credit constraints. Between 2009 and 2013 it provided guarantees for \in 41 billion worth of loans. The increase in its endowment and the provision of a government back top guarantee, which relieves banks from capital charges for loans covered by the Fund, contributed to the expansion of its activity.

Further actions were undertaken to overcome liquidity problems, included three debt suspensions, signed in 2009, 2012, and 2013 that allowed firms (with no bad debts, restructured loans or ongoing foreclosures) to suspend for a year the repayment of the loan principal on some forms of debts contracted by SMEs, including provisions aimed at facilitating their debt service. The measure was applied to all SMEs, which employed fewer than 250 staff, with an annual turnover not exceeding \in 50 million and/or an annual balance sheet total not exceeding \in 43 million. Through 2009-13 around \in 23 billion worth of debts rolled over. Evaluations referred to the first two circles of SME moratorium showed that the measure had proven effective in helping firms, while limiting forbearance risks.

Another measure enhancing access to credit was the use of the *Deposits and Loans Fund* (Cassa Depositi e Prestiti³⁰, CDP) to supply the banking system earmarked funds derived from postal savings at convenient interest rates to support SMEs. After the exhaustion of the first \in 8 billion allocation, which benefited 53000 firms, in 2012 CDP made available further \in 10 billion but only \in 3 billion of this amount was absorbed by the banking system in 2013.

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²⁹ A fund set aside by state insurance regulators to pay out claims to policyholders in the event an insurance company becomes insolvent. The central guarantee funds are accumulated from regular assessments charged to operating insurance companies. When the state courts declare an insurance company insolvent, regulators recover the company's remaining assets into the central guarantee fund. Remaining policyholder claims are then paid out of the fund.

³⁰ It is the original Italian name.

Many initiatives were undertaken in 2012 to alleviate firms' liquidity pressures stemming from public administration payment delays; however, the resources released to enterprises were rather modest. In 2013-14 new measures were approved for the payment of general government overdue debts, mainly commercial, amounting to ϵ 47 billion in these two years: through March 2014 about half of this amount had already been paid. In order to promote a more diversified corporate-capital structure and reducing the weaknesses to adverse bank loan supply shocks, in 2012, the government regulated the issuance of short and medium-term debt instruments by unlisted firms other than banks and micro enterprises. At the beginning the measure was deployed by larger companies, but SMEs started to use it in 2014.

The above mentioned initiatives, mainly targeted at SMEs, aimed at easing access to credit, supporting liquidity needs and fostering the access to market financing. The impact of some of them was not negligible: between 2009 and 2013, the financial resources made available through debt moratoria and the interventions of the *Central Guarantee Fund* and the *Deposits and Loans Fund* amounted to almost € 76 billion.

2.2 RECOVERY STRATEGIES FOR ITALIAN SMES

Obviously, during and after crisis, not only in the Italian context but also in the global marketplace, SMEs have had some great advantages deriving from their nature: flexibility and dynamism. The entire economic environment should be aware of all opportunities deriving from these aspects and take benefit from it, by implementing innovative strategies in order to overcome the thresholds created or worsened by the financial crisis in terms of credit conditions and, consequently, competitiveness. Strategic areas of intervention might include: marketing innovation, relational enhancement through collaborations, product innovation, and internationalization process.

The fundamental roles of innovation and internationalization are briefly analysed below; benefits from collaborations, instead, will be vastly described in the next chapters.

2.2.1. Role of Innovation

Small and medium-sized enterprises represent a wide business base in every European country, which play a significant role in the economic development (Bacon & Hoque, 2005). They are considered the backbone of the European economy due to their ability to produce sustainable development through innovation, society support, workplaces, and wealth for the land they are placed in (Terziovski, 2010; Konsti-Laakso *et al.*, 2012; Foreman- Peck, 2013).

One of the most common definitions of innovation is, "the mechanism by which organisations produce the new products, processes, and systems required for adapting to changing markets, technologies, and modes of competition" (Lawson and Samson, 2001). Scholars agree that single firm innovation capabilities do not derive from a single ability, but from many distinct elements that refer to the internal characteristics of the organization. These elements include Absorptive Capacity and External Knowledge, Organizational Structures and Culture, Leadership and Communication, Individual Creativity and Innovativeness, and Organizational Learning Culture (Cohen & Levinthal, 1990).

The organization's ability to transform knowledge into new products, services, and systems that create benefits for the company and its stakeholders, is also a necessary requisite for being considered totally innovative. "SMEs always need to face difficulties and barriers in developing innovation to bring new solutions for the market, even though the opportunities the market itself gives to SMEs are much lesser" (Konsti-Laakso et al., 2012).

Von Hippel (1988) underlines that "networks and alliances of customers, suppliers, competitors, and other non-market participants are the key source of innovation". SMEs dynamism and flexibility implemented in new networks and alliances allow the contamination between different organizational options, and serve as an effective means of reducing costs, risks, achieving economics of scale, and reducing new product development time.

Bougrain and Haudeville (2002) found out that before SMEs can tap into knowledge outside the company, "they should develop their internal capabilities by recruiting skilled staff". SMEs have long been recognized as important actors in "creating, applying, and introducing innovations", especially within local economies (Curran & Blackburn, 1994). Barrow (1993) underlined that "small firms developed over 60% of all innovations" in the 20th Century.

The innovation capability can be considered a *condicio sine qua non* for the value creation. However, "it is not enough to assure a sustainable competitive advantage in fast cycle markets" (Garbelli, 2016), where:

- The firm's competitive advantages are not shielded from imitation;
- Imitation happens quickly and somewhat inexpensively.

Small and medium-sized enterprises must assure an adequate level of product innovativeness for company survival in global markets. Therefore, SMEs must not only be able to develop their internal development activities, but "must also be able to strengthen their abilities to collaborate with other companies as well as with customers" (Bougrain & Haudeville, 2002). Nevertheless, innovation traditionally takes place mostly within a single firm, SMEs often do not have the commercial strength or professionalism required to successfully turn innovations into inventions (Rothwell, 1989). Many items sustain this idea: "the increasing availability and mobility of skilled workers, the flourishing of the Internet and venture capital markets, and the broadening scope of possible external suppliers" in the present age (Chesbrough, 2003).

We have also to point out that today's organisations face an additional challenge, which is the requirement to innovate, not just occasionally, but steadily, quickly, and with a solid success rate (Lawson and Samson, 2001). "To enable the best possible value creation, innovations are often realized in competitive networks that combine knowledge and assets from the partners" (Jørgensen & Ulhøi, 2010). Notably, networks widen the opportunity and access to key resources from the "firm's environment, like information, capital, goods and services which then have the potential to maintain or enhance competitive advantage" (Gulati et al., 2000; Lawson & Samson, 2001). Among the advantages of a competitive network, Bititci (2004) also lists the speed to market, economies of scale, and improved customer service.

Accordingly, the ability of organizations to aggregate – participating for instance in value innovative networks or through *Collaborative Asymmetric Partnerships*³¹ – has been identified as a necessary requisite for business innovation in fast-cycle markets for three reasons. Firstly, "it is of great relevance to develop innovative capabilities by involving other organizations in the process" (Jørgensen & Ulhøi, 2010). Secondly, the R&D department

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³¹ The concept will be widely analysed in the next chapter.

must encompass outsiders who can help new ideas to rise (Chesbrough, 2003). Thirdly, for the implementation of innovations, other organizations need to be involved (Prahalad & Ramaswamy, 2004).

Comparing SMEs to large firms, it is clear that the first ones are flexible and can even be more innovative, especially in new areas, but can only engage limited resources. Collaborating with other companies can help SMEs find ways to achieve many benefits unaffordable individually, for instance, to market their products effectively and to provide satisfactory support services. Of course, satisfy all the partners involved in the collaboration should lead to a win-win situation for both, through the creation of a new and unique value proposition. A value proposition is defined as "An implicit promise a company makes to its customers to deliver a particular combination of values" (Martinez, 2003). Each proposition searches for a unique value that can be delivered to a chosen market. "Successful companies do not just add value, they re-invent it" (Bititci et al., 2004).

Accordingly, the process of innovation would be extremely challenging for small-medium companies without networking partners. Nevertheless, "they can get the best by working together in aggregation" (Antonioli et al., 2011); SMEs seem to have some advantages compared to larger firms in "promptly responding to new market opportunities" (Lee et al., 2010; Ortega-Argilés et al., 2009; Narula, 1994). However, they mostly suffer from an "insufficient amount of resources needed" for the innovation process (Narula, 1994; Konsti-Laakso et al., 2012). Such lack of resources can be overcome through networks. Literature experts, as a result, think that small businesses associated with a "network could produce more innovation compared to those standing alone" (Konsti-Laakso et al., 2012).

According to Vanhaverbeke and Cloodt (2006), value networks can be described as "inter-organizational networks linking together firms with different assets and competencies", which attempt to respond to new market opportunities and can be seen as a context for open innovation (Chesbrough, 2003). Open innovation recognizes that knowledge outside the organization is valuable and highly beneficial; the current shift from closed to open innovation activities means that the organizational value network offers many potential partners for innovation. Thus, these potential partners include large firms, Universities and research centres, and other SMEs. Alliances with large firms have often benefited SMEs, but they have also forced SMEs to share their technological competence with the large firms, leading to increased flexibility for the latter. As a result, "SMEs gain opportunities to collaborate with large firms, losing opportunities to compete against them" (Narula, 2002). In

addition, depending on their organizational size, companies have to face different innovation barriers. In their study on Asian SMEs, Lee *et al.* (2010) underlined that, basically, "SMEs difficulties are mostly related to human resource management and to the limited resources in developing their activities".

2.2.2. Internationalization Process

The internationalisation process involves two types of challenges: being a foreign, i.e. *foreignness*, and the lack of knowledge of the existent networks among firms, i.e. *outsidership* (Johanson & Vahlne, 2009). Consequently, it is fundamental for a SME to have distinctive characteristics and instruments to overcome these difficulties. The vast majority of European SMEs tend to export only to other Member States, 2/3 of all SMEs, and not in the extra-Europe markets (Mainoldi, 2015). The aims that drive the process are numerous and might have internal and external nature. Internal driven reasons are related only to a decision of the governing division of the company, external ones are linked to environmental pressure; e.g. the financial crisis.

External markets penetration is the major goal a SME wants to achieve through internationalization. It might be a consequence of an increasing demand in foreign markets, or a contraction of the domestic demand. In any case it is strictly correlated to a growing purpose of the firm, evaluating other external opportunities. It can be also motivated by the saturation of the domestic market or the gain of efficiency through new prospects, for example through economies of scale. The lack of resources can drive a small and medium-sized enterprise to look for them out of its own country; the necessity of resources can be a consequence of the scarcity of natural assets or of the need of cheaper productive inputs (Welch, Benito, & Petersen, 2007). Furthermore, the internationalization process can be a strategic answer to the requirement of new competences in order to gain competitive advantage through external collaborations in other countries. In addition, another reason of such a decision of expansion in new markets can be related to the will of maintaining or reinforcing relations with other actors or costumers in the market (Simões, Esperança, & Simões, 2013).

As a result, there is no exact strategy to internationalization and the modes of entry are many: through exports, contractual modes (licencing, franchising, strategic alliances such as partnerships), and direct investment, e.g. joint ventures (Arcifa, 2014).

3. COLLABORATIVE ASYMMETRIC PARTNERSHIPS

This chapter presents an analysis of the role of *Collaborative Asymmetric Partnerships* in order to understand them as a strategy for recovery; what the economic and financial crisis has underlined in the last few years, is the constant presence of uncertainties in the economic environment, and the need to cope with them. Asymmetries attempt to be the solution.

"A partnership may be called asymmetric when it involves co-operation between two companies with marked differences in terms of resource portfolio and market position."

BARABEL, M., MEIER, O., & SOPARNOT, R.; 2016

The specification "Collaborative" is chosen in order to separate merely outsourcing partnerships from co-creative ones, based on a strict collaboration and contribution of resources. In the field of asymmetries, what becomes crucial is a new perspective on changing the rules of competition by integrating new actors, even if these actors are not similar to each other, choosing a sort of "blue ocean strategy" orientation by which partnerships are unconventional and characterised by a collaboration among SMEs and established companies.

3.1. Introduction to Collaborations through Innovation

The changing and challenging context of the last ten years have been generating an increasingly globalised environment that produces pressure on traditional organizing, research, development and innovation modes. The technological and organizational progress has modified the perspectives of the incumbent companies and unlocked new opportunities for new entrants marking innovation as a spotlight. Innovation is a concept widely used in

³² The "Blue Ocean Strategy" is a book published in 2005 and written by *W. Chan Kim and Renée Mauborgne*. The metaphor of red and blue oceans describes the market universe: red oceans represent all the industries in existence today, the known market space; blue oceans, in contrast, denote all the industries in a market space that is untainted by competition, in which demand is created and not fought over.

economic studies, but it can have different interpretations, depending on the context taken into account. It is commonly perceived as the commercialization of new ideas in the marketplace, representing something new, a product or a service; Schumpeter³³, instead, saw innovation as "new combination" of ideas by the innovator, referred to the entrepreneur, who had a central role in his theories; but is also often identified as a driver of commercial growth (Czuchry, Yasin, & Peisl, 2009; Piattier, 1984; Price, Rae, & Cini, 2013).

The latter definition refers to its role in the competitiveness of a company: by introducing new or improved products or services that tap into existing or latent demand in the market, thereby creating additional value for firm and consumers; and by increasing the productivity of firms employing such innovations (World Economic Forum, 2015). Technological advances and economical turbulence have given rise to new global challenges and opportunities for new entrants to develop innovative outcomes. As a recent study states: 38% higher ROI and 22% higher gross margin is reached by companies actively supporting innovative behaviours rather than by more conventional firms (Hewitt, 2012).

While speaking about innovation, cross-organizational collaborations need to be introduced as a positive innovative example for possible strategic change. Many academics have openly underlined the importance of co-operation for innovation in order to conquer a modified marketplace and displace current product lines in favour of entirely new categories in a dynamic environment (Jorde & Treece, 1990; Von Hippel, 1987; Qiuntana-Garcia & Benavides-Velasco, 2004; Carayannis &Alexander, 1999). In other words, the role of collaboration based on innovation is commonly recognised as a positive strategic decision that must be acknowledged as a recovery tool. Organizations are increasingly collaborating with external actors and moving to more "open forms" of innovation in order to accelerate it and create more competitive market positioning.

Today's environmental challenges tend to a common strategic behaviour based on spread innovation and extreme flexibility as the most used strategies to enter new markets or have access to intellectual property (Arora, Fosfuri, & Gambardella, 2001). But innovation is not a-one-size-suits-all process as stated by Christensen *et al.* (2003) and appears in multiple

³⁴ Open innovation is the paradigm that assumes that firms should use external ideas as well as internal ideas, and internal and external paths to market.

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³³ Schumpeter, The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle, 1934.

features; it can be incremental, radical and transformational³⁵ (Foster & Kaplan, 2001). Enterprise collaboration, co-creation and relationship through innovation can be considered radical/transformational *modus operandi* in which strategic change is oriented towards the realignment of the firm with the purpose of facing the changing environment. One option to implement this strategic view is collaboration with SMEs.

It is a consequence of the increasing attention given to small and medium-sized enterprises and start-ups by both policy makers and researches that display them as a "facilitator of organizational development and a corridor of product innovation" (Comi & Eppler, 2009). On the one hand young ventures are often innovative, more flexible than large firms to explore new solutions and creative business models to support them. On the other hand large firms give to SMEs the opportunity to achieve experience and implementation of ideas through production, marketing, commercialization and branding capabilities (Hogenhuis, Hende, & Hultink, 2016). Asymmetric partnerships are the focus of these collaborations in which the partners differ significantly in size, resources or commercial experience (Minshall, Mortara, Valli, & Probert, 2010). This inequality has a lot of consequences and stands in a multitude of differences that do not mean that inequality is not possible (De Man, 2013). The next paragraphs will explain why it is important to build an asymmetric partnership and which are the challenges to face in order to manage it.

3.1.1. Formal and Informal Collaborations

The role of SMEs is already clear: they are the majority of private sector enterprises, accounting for more than one-half of total employment, and driving economic development (Audretsch, Horst, Kwaak, & Thurik, 2009). However, their proper features of size can represent an obstacle in growth prospects and worsen vulnerability to barriers, or constraints, that in the academic literature were distinguished between 'internal' (e.g. lack of management time and skills) and 'external' (e.g. adverse market conditions and institutional arrangements) constraints (Buckley, 1989). Prior studies have investigated the extent to which SMEs face constraints as well as their direct growth implications, especially of limited financial and

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³⁵ Incremental innovation is characterised by small and continuous improvements to products, processes and services. Radical innovation is the creation of new products that make the previous one obsolete. Transformational innovation is an historic and irreversible change in the way of doing things.

human capital resources (Beck, Demirguç-Kunt, & Maksimovic, 2005; Buckley, 1989; Ferri, Galeotti, & Ricchi, 2003).

As we have already seen in the previous paragraphs, collaborations among different organizations can overcome these constraints and represent a solution to the problems mentioned above. Inter-firm relations are separated into formal and informal collaborations established to create new networks among companies. The idea relies upon the necessity to have access to scarce resources or the need in terms of control and power over coalition partners to influence each other behaviour.

Collaborations between firms tend to have a wider scope than one single task or one single purchase and are usually based on complementary competences and reciprocity. *Informal* ones are created for the specific necessity of transferring skills and expertise, and also knowledge between firms, which can become potential market opportunities (Borch & Huse, 1993; Haahti, Madupu, Yavas, & Babakus, 2005).

Despite formal collaborations based, as an example, on purchasing, a firm that enters an informal partnership gains access to resources and information over which it does not acquire full control or ownership. This type of inter-firm collaboration is based on trust and verbal agreements rather than on comprehensive written agreements; this characteristic rarely provides complete safeguards against opportunistic behaviour. On the other hand, informal collaborations can enable participants to retain considerable independence (Borch & Huse, 1993; Haahti, Madupu, Yavas, & Babakus, 2005; Wright, Westhead, & Ucbasaran, 2007; Zhou, Wu, & Luo, 2007).

Given the disadvantaged position of SMEs in an Asymmetric Partnership, it is essential for small and medium-sized enterprises, which accesses new resources, to secure control over them. To this purpose, informal collaborations are a potentially dangerous strategy since it may not prevent partners from accessing these resources as well. Contrary to formal collaborations, informal ones, almost by definition, lack secure mechanisms to monitor and enforce actions against opportunistic behaviour (Hessels & Simon, 2013).

3.2. REASONS TO BUILD COLLABORATIVE ASYMMETRIC PARTNERSHIPS

The importance of collaborations (alliances, networks, joint-ventures, partnerships, etc.), in the new globalised world, is a tool vastly studied and almost taken for granted. However, the issues associated to the relationship between SMEs and large companies, within the framework of strategic alliances, continue to be a less explored area in management analyses (Chen & Chen, 2002). Which are the reasons for building a collaborative asymmetric partnership, and why should corporate managers have an interest in SMEs? Small and medium-sized enterprises and start-ups represent the actors who are driving major innovation and disrupt entire industries; their capabilities are mostly noticeable in high tech sectors, but not exclusively. Companies like Uber and Spotify, both established less than ten years ago, have reached billion dollar valuations and are replacing incumbent technologies and existing business models (Mocker, Bielli, & Haley, 2015). An asymmetric partnership can create a win-win opportunity that aims to reach not only pure efficiency but also a long-term success based on innovative solutions.

"Big companies are lately waking up the fact that their industries are disrupted by innovations led by start-ups. Instead of thinking "some incumbents are gonna lose, some start-ups are gonna win", start-ups should be seen as potential partners. Partners to create more value for your company, more value for the consumer, and for the whole industry."

ZOCCO G., CO-FOUNDER OF INDEX VENTURES, 2015

Alliances have been changing through time and have passed what we can consider a "three generations evolution". The first generation, until the 1990, is known as the joint venture era during which this was the most used organisational type with the aim to internationalise; the second generation, from the early 1990s until now, is the contractual era, characterised by a strong research of innovative and flexible solutions; the third generation of alliances, instead, is an emerging model that takes its most distinctive feature from open innovation and multi-partner alliances (De Man, 2013). Even if these are the most widely used forms during time it is not a linear representation and numerous variations have always changed the possible styles of having an alliance. More than that, various authors have criticised the use of many names to describe sorts of cooperation among firms (Baudry, 1997;

³⁶ Ard-Pieter De Man has studied the evolution of alliances through time and has categorised them in three generations. These are representative of the trends typical of these times. De Man, A. (2013). *Alliances: an executive guide to designing successful strategic partnerships.* UK: John Wiley & Sons.

Foued *et al.*, 2006) but they are necessary to explicate the nature of the interactions continuously changing through time (Barabel, Meier, & Soparnot, 2014). As a consequence, the presence of a huge variety of names tends to create confusion while it is speaking about strategic alliances like partnerships, but a clear definition is given by Jolly (2006):

"A link deliberately created between several sovereign companies, who outside the ambit of this link continue to be independent. It is characterised by the pooling by at least two companies of part of their resources in the pursuit of shared goals within a given area and the achievement of mutual benefits."

JOLLY D. R., 2006

This kind of alliance might be defined asymmetric when it involves co-operation among companies whose main differences are in terms of "resource portfolio and market position" (Chtourou & Laviolette, 2015) but also size (turnover, market share, staff etc.). The two or more entities, as underlined by the definition above, are independent; this doesn't mean that if the collaboration is successful and becomes part of the core business, it cannot become an acquisition, but at least initially there is legal autonomy among the actors. Furthermore, the alliance is created in order to share revenues, risks and costs of a joint goal pursued by joint decision-making in the formalisation of an agreement within a specific framework, that can be open ended or restricted to a specific period.

The speed of technological development and the presence of numerous different new technologies push firms which might want to commit to more than one technology at a time and learn from others and maybe, subsequently, integrate (Barabel, Meier, & Soparnot, 2014). It is a consequence of the increased competition that spreads not only from well-known industries, but also from new, improbable, actors like SMEs who may have a different approach to how the economic environment is changing, likewise the customer demand:

"DuPont has been applying science and innovation to address the world's most difficult challenges for over two centuries. Today, these challenges are of increasing complexity and scale. One company cannot solve these challenges alone. Our global partnerships and our collaboration with other companies, governments, universities, NGOs, and others are the key to meeting customer and customer needs in critical areas such as food security, an improved energy mix and the protection of people and the environment."

KULLMAN E., CHIEF EXECUTIVE OFFICER, DUPONT, 2015

Both parties of a strategic alliance in an asymmetric partnership have some goals in common that they expect to achieve by implementing this kind of collaboration. First of all, one of the aims of such cooperation rises from the need of internationalization: improving a company's position in the global market, by expanding corporate operations across geographically dispersed locations (Comi & Eppler, 2009). Through this strategic choice they can overcome barriers to foreign market entry and have access to location-specific assets in foreign countries. As a result, an alliance is not exclusively a matter of increased efficiency but a gain in terms of opportunities to facilitate positioning change or to amplify frontiers, spreading risks and costs, for example, related to innovation, in order to increase market power and new complementary skills that are mutually beneficial.

ENVIRONMENTAL CONTEXT Technological Global Increasing Competition Development Crisis COLLABORATIONS Share: Internatiorevenues, Increase **Improve** Innovate nalize costs, risks, position efficiency resources

FIGURE 21 - REASONS TO BUILD COLLABORATIONS

Source: Author.

Facing the possibility to create an asymmetric partnership, SMEs want to overcome some disadvantages related to their small and new nature; for instance, their scarcity of resources and few physical assets besides the lack of expertise outside the core offerings. Moreover, one of the most obvious difficulties is the nonexistence of scale, distribution channels and marketing know-how that create problems in effective competition, market entry

and infrastructure presence. Furthermore, SMEs have a huge problem because of the insufficient understanding of innovation's full applicability and potential in the marketplace. Instead, large incumbent enterprises might have the need to overcome possible heavy bureaucracy and inertia, leading to slower information flow, less flexibility and less creative thinking that is typical of a risk averse culture by which they have less access to new technologies and state-of-the-art engineering. Hence, the creation of such an alliance might put SMEs in a disadvantaged position because of the likelihood to be less successful in their negotiations, with the consequence of an unbalanced contract and a grater risks related to opportunistic behaviour by the large enterprise. These are just some examples of the difficulties that can appear even before the managing needs of such a partnership.

3.2.1. Advantages of Collaborative Asymmetric Partnerships

Having seen the reasons that can push a company to start an asymmetric partnership, now the question of this study is related to the effective advantages resulting from it. Table 7 displays, for both SMEs and large enterprises, which are the benefits deriving from the cooperation.

Table 7 - Benefits from Asymmetric Partnerships

For SMES	For LARGE ENTERPRISES	
Financial resources	Dynamism	
Critical size	Sources of innovation	
Spread of costs	Sources of technological knowledge	
Decrease of risk	Key skills	
Deep-rooted processes	Proficiency in a specific niche	
Marketing resources	Easy processes	
Commercial resources	Lower costs	
Regulatory expertise	Quicker response to market signals	
Management experience	Potentially disruptive outcomes	
Brand power & reputation	Closer to users and customers	
Institutional legitimacy	Awareness of future trends	
Valued networks	Rejuvenate corporate culture	

Sources: adapted from (World Economic Forum, 2015; Barabel, Meier, & Soparnot, 2014).

Advantages for SMEs. Dealing with an asymmetric partnership might not be easy for SMEs primarily because of the inferior position from the contractual point of view in terms of bargaining power. Nevertheless, the benefits that such collaboration can provide are many and completely worth the risks related to it. The most common reason that drives a SME to an alliance is related to its financing limits that a large established company could encompass with its intervention. Large firms, for their nature, are characterised by the presence of advantages related to their size, and maturity in the market, such as economies of scale, product differentiation, and distribution channels. But, the reason why these characteristics are an advantage for SMEs is directly related to the possibility to spread costs, for example of R&D, over an extensive and diversified sales base. Some features of the large enterprise, like the deep-rooted processes, decrease the risk related to the implementation of anew technology (Barabel, Meier, & Soparnot, 2014). Their experience is highlighted, in terms of benefits, by the expertise in various extents like regulatory and compliance; but also marketing and commercial resources gained through time give them the instruments to build a strong basis able to facilitate the conversion of technological know-how into a commercial commodity. After having helped the small enterprise in terms of introduction to the market by tangible resources, their relational networks are of primarily importance in order to effectively commercialise the final product or service (Comi & Eppler, 2009). Moreover, an alliance with a large company can generate assistance also in the period after the commercialization thanks to their sophisticated IP protection and management due to experience and resources. Consequently, one of the less visible effects of this kind of asymmetry derives from the acquisition of a sort of institutional legitimacy directly linked to brand power and reputation of the larger partner.

Advantages for large enterprises. Radar function (De Man, 2013) is one of the most important reasons why a large enterprise allies with a SME; it consists of the opportunity to develop and, mostly, test new technologies and service solutions with less costs and risks to their core operations. But, why choose a small enterprise or a start-up today? Because these types of firms are characterised by an extreme dynamism formed by the necessity to face continuous change and thanks to their size, this quality is highlighted by a great organizational flexibility. Furthermore, SMEs are considered authentic sources of innovation for their creativity but also because they are closer to sources of technological knowledge such as universities and research centres. Accordingly, the gain they provide to larger established enterprises is related to their competitive advantage in terms of key skills and

proficiency in a specific niche. Development of radical innovations is more rapid and at a lower cost because SMEs are unencumbered by complex processes and able to give quicker response to market signals thanks to the fresh perspectives on nascent opportunities. The truly new and potentially disruptive products and services SMEs can develop are a direct consequence of their closer connection to users and customers who represent growth-oriented markets. Besides immediate benefits, a SME can offer also potential advantages related to the awareness of future trends and the potential of new technologies. Thus, one of the most hidden and also valuable advantages linked to asymmetric partnerships is the capability to rejuvenate corporate culture and external perception in the marketplace with competitors but also with possible other partners; and, as a consequence, it helps create an entrepreneurial mindset among employees who become exposed to agile teams, lean approaches and fresh thinking.

3.3. COLLABORATIVE ASYMMETRIC PARTNERSHIPS IMPLEMENTATION

Alliances have become a standard to organize businesses for the reasons listed in the previous paragraphs. Therefore, an alliance design is essential; at least to comprehend which processes of collaboration can be the most suitable for the actors involved. Managerial literature has devoted considerable attention to this topic and to its realization and this implies that many forms of partnerships exist in order to explain the different natures of collaboration.

3.3.1. Steps

According to Sailer *et al.* (2014) the collaborative process is not static, but dynamic, and needs to be revisited in terms of goals and interests. It can be seen as a "repetitive sequence of negotiation, commitment, and execution gates", in which the negotiation stage aims to clarify the purposes of both parties elucidating bargaining power and informal attitude. The central focus of constructing a partnership is related to the commitment stage, characterised by the extensive definition of legal, behavioural, and governance structures affecting the alliance. The author describes it as a repetitive sequence because of its cyclic nature; the execution gate is the final stage of the process only until the manifestation of the

necessity to pass again throughout the negotiation stage, commitment stage and so on. Differences between partners, in asymmetric partnerships, are more tangible than in other types of alliances; these relationships are highly sensitive to the characteristics that make established companies a great recovery opportunity for SMEs but also a huge challenge in the creation-negotiation and management process.

"Young firms are a great source of innovation. But effective collaboration requires established corporations to be faster and more agile as young firms have neither the time nor the patience to wait for the process that is typical for established corporations. Only then will the elephant and the mouse be able to dance together."

JURGENS T., VICE PRESIDENT, INNOVATION, ROYAL DUTCH SHELL, 2015

Needs arising from an asymmetric partnership are multiple, and for this reason it is almost impossible to decree a precise process for building it; but there are a number of steps that can help in the correct valuation of possibilities without risking to forget some important features to be successful. Three main layers exist as macro categories for the basis of such an implementation (World Economic Forum, 2015): *Prepare, Partner, Pioneer*.

PARTNER

Organizational Partner Resources Allocation

PREPARE

Readiness Objectives Partners

FIGURE 22 - PARTNERSHIP POSITION THROUGH INTEGRATION PROCESS

Source: adapted from (World Economic Forum, 2015).

Prepare phase is critical and, most times, less recognised as fundamental, because it concerns the groundwork before all negotiations. It is an extremely important step consisting, firstly, of defining objectives (Mocker, Bielli, & Haley, 2015). Collaborations have a stronger possibility to be successful if only both parties have clear idea of the objectives of the partnership itself and the definition of a business case that describes goals and value creation they want to achieve. The outcomes expected can be different for the different stakeholders and must be aligned with the organization's global strategy. The various aims involved can be related to the necessity to rejuvenate corporate culture, innovate big brands, be more flexible, search funds for innovation development, solve business problems, expand into future markets, etc. In any case, it is essential to previously ask yourself which is the main reason which pushes your choice to build an asymmetric partnership, in order to create a business case to clarify if the intentions are realizable and whether costs, direct and indirect, and risks are not outstanding benefits of the alliance. Specifically, these considerations, and an accurate analysis of vision, mission, and strategy of both companies (De Man, 2013), help understand the level of dependency that one partner might have compared to the other. Prepare layer involves also the realization of organizational and behavioural readiness; as a consequence, not only static considerations about the possibilities of gain involved must be taken into account, but also the complete acceptance by the organization in a positive and proactive attitude. Accordingly, strategic thinking of managers should be focussed also on the encouragement of dialogue between parties and inside companies in order to reinforce the flow of information through instruments like cross-functional activities and crossorganizational teams³⁷. The preparation dimension also involves the prerequisite of attract possible partners. In order to achieve this scouting both organizations must direct their image and become an attractive partner for the alliance; taking part in new networks or enhance reputation are some strategic tools to accomplish the aim.

Partner layer consists of the effective creation of the partnership. This phase includes many steps, in particular: partner selection, outline blocks building, organizational shape definition, resources connection, and temporal horizon plans. In order to create a balanced collaboration, the partners involved must have "complementary competences, compatible objectives, and cooperative attitudes" (Brouthers *et al.*, 1995) as stated in the section related

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³⁷ Solutions involving common challenges of both organizations in an asymmetric partnership will be extensively analysed in paragraph 4.6. with the support of: Mocker, V., Bielli, S., & Haley, C. (2015). *Winning together. A guide to successful corporate–startup collaborations.* London: Nesta; Founders Intelligence; Startup Europe Partnership.

to the preparation layer; only after having defined such characteristics, a partner selection can be made analysing more deeply strategic fit and risk assessment for each organization (Comi & Eppler, 2009). SMEs should be even more careful, performing due diligence on the larger company, because of their inferior perspective, since they might have more difficulties in facing a failure (Minshall, Mortara, Valli, & Probert, 2010). Furthermore aspects must be taken into consideration after partner selection; building an asymmetric collaboration concerns informal mechanisms as much as formal ones. As informal mechanisms we consider organizational culture-related conducts with the aim of increase trust, commitment and informal communication in order to create a bridge between behavioural differences and understand how to cope with them, for instance by meetings, informal events and leadership orientation to collaboration (De Man, 2013). Formal mechanisms include, instead, financial models of costs, revenues, profits, and property rights; legal structure such as exclusivity rights, non-compete clauses and exit fee; and, of course, organization structure in terms of teams, decision making structures and, principally, the organizational framework. As it is explained in the next paragraph, there are different types of asymmetric partnership that can be defined. What is fundamental in the partner section is the selection of the right option, which must fit with the objectives designed in the previous preparation phase. Consequently, these different options derive from the kind of relationship needed to achieve the purposed aims. Relationships can be created only on the basis of one-off events, in which start-ups are attracted to create competitions to develop a specific innovative solution; other connections can be the output of the need of sharing resources, in this case the smaller partner takes advantage of co-working spaces, for free or for rent, or of "soft support" from large enterprises. These were examples of relationships that don't need the presence of organized partnership to work; in contrast, when talking about business support through incubators or accelerator programmes, product co-development and procurement with other firms, investments in corporate venturing, or possibilities of acquisitions by other organizations, these partnerships must be built with a certain specificity using structured types of collaboration. Having chosen the programme option of the asymmetry, it is then important to effectively adapt and forecast a sort of connection with resources like costs, employee time, products that include all goods, technologies and services involved, and appropriate customer networks (Mocker, Bielli, & Haley, 2015). This estimation must be dynamic and continuously adapted to the circumstances of the partnership throughout time. Accordingly, while defining the governance structure, the alliance participants must realign their perceptions, expectations, commitment and time horizon on the basis of possible changes that can occur.

Pioneer layer is, conclusively, the final step in the implementation of an asymmetric partnership and consists of the continuous adaptation mentioned above. Once the collaboration has been defined and both parties are employing their efforts, it is important to recognise that in a situation of asymmetries, primarily if related to innovation, uncertainties can destabilize the collaboration asking the need for some revisions (World Economic Forum, 2015). This aspect is often underestimated even though challenges and constant maintenance are typical in partnerships, and their absence can create irreversible threats.

3.3.2. Types

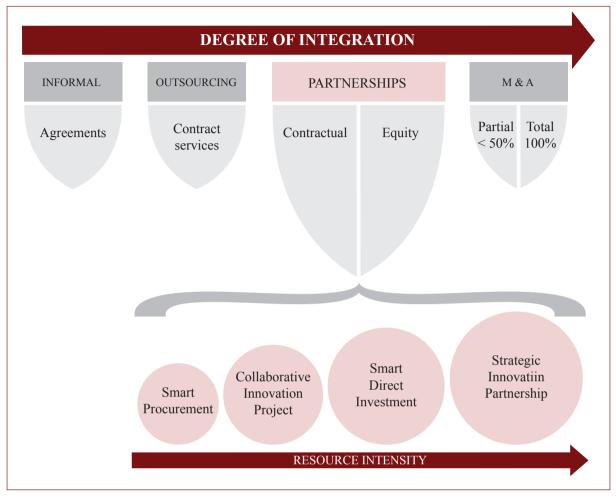
Building a partnership includes previous negotiations and establishment of a proper structure, that involves not only formal, but also informal agreements that set the tendency and the legal framework of the relationship. There is no exact structure, but the aim of such an effort must be win-win collaboration, and, in order to obtain that, a proper shape must be selected, remembering that when cooperation is for innovation, it differs from all other types because of the higher levels of uncertainty. As stated by James *et al.* (2014)³⁸ two main categories of relationships related to innovation exist: supply chain or *vertical relationships* which are characterised by the flow of material goods, possibly creating innovative openings, for example manufacturing sub-contracting relationships or producer-customer relationships; and knowledge creation and exchange or *horizontal relationships* that are generated *ad hoc* to pursue specific needs related to innovative solutions, for instance asymmetric project collaborations, licensing agreements, corporate venturing, and open innovation ecosystems.

Asymmetric partnerships are part of a range of relationships that can be analysed accordingly to the degree of integration they have (Minshall, Mortara, Valli, & Probert, 2010). Taking into account a sort of process of increasing integration, we can see, in terms of governance, the position of asymmetric alliances.

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³⁸ James, A., Gee, S., Love, J., Roper, S., & Willis, J. (2014). *Small firm-Large firm relationships and the implications for small firm innovation: What do we know?* Copenhagen: DRUID Society Conference

FIGURE 23 - DEGREE OF INTEGRATION



Source: adapted from (Minshall, Mortara, Valli, & Probert, 2010) & (Pekár & Margulis, 2003).

Relationships can, therefore, start with an informal agreement and, after a certain period, become acquisitions. However, figure 23 doesn't represent an optimal or effective process of integration, but a scheme of the steps in which a partnership can be recognised. The first phase in the image above is considered informal because also non-contractual agreements can be part of it; normally these are examples of intentionally short life relationships. Outsourcing refers to the stage of contracting but only for the supply of a specific product or service without a co-creation approach of collaboration. Mergers and acquisitions are the most integrated steps in a relationship, in which the larger player partially or totally incorporates the small firm in order to make it one of its core businesses. The intermediate stage is represented by partnerships and alliances that are the middle point of active cooperation between partners. Partnerships can be essentially divided into two principal types: equity and contractual (De Man, 2013). *Equity partnerships* are characterised by a participation of one company to the shares of the other one; it involves an agreement of <50%

of the total amount, a cross-shareholding or a JV. Instead, the vast majority of asymmetric partnerships are *contractual* because it permits more flexibility in terms of customization of the agreement, as far as timing, resources involved and future collaborations are concerned.

Asymmetric partnerships can thus be contractual or equity alliances and inside these categories, four types of collaborative partnerships can be derived through a criterion of resource-intensity (World Economic Forum, 2015).

- 1. Smart Procurement is the collaboration based on existing innovation, consistent in a purchasing agreement that involves funding for the development of the innovation but with the need of limited additional resource or management attention; it is a typical form of partnership with incubators, accelerators or for supplier collaborations. One example was established between DigitalGlobe, a company of 1,200 employees, and Orbital Insight³⁹, with less than 50, in which the two actors remained separate legal entities but built a revenue-sharing scheme of collaboration. DigitalGlobe had the opportunity to further lever its asset base improving innovative supply to new or existing clients, using algorithms and models already developed by Orbital insight.
- 2. Collaborative Innovation Project is the collaboration generated for a specific innovation need, in which the investment is directly related to the development of the exclusive outcome and requires the allocation of resources limited to the project scope; an example is given by supplier collaboration and universities or research centres cooperation. Notably, ABB 140,000-employees company established in 2014 an Innovation and Technology alliance with Solar Impulse, a medium-sized enterprise⁴⁰. In this collaboration ABB provided funds and three engineers who worked full time on a specific project fully led by Solar Impulse based on the power yield and reliability of solar energy systems.
- 3. *Smart Direct Investment* is related to collaborative innovation to scale innovations, it implies a capital investment and provides more control on the partner. It is a potential type

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³⁹ DigitalGlobe is a commercial vendor of high-resolution satellite images, aerial photos and geospatial content. It was looking for a further commercialization of the images it generates and develops new products. Orbital Insight is a geospatial big data company that uses satellites and other geospatial data sources to understand and analyse socio-economic trends. It was looking for a partner who had access to a larger imagery database.

who had

⁴⁰ ABB is a power and automation technology company focussed on sustainable transportation and energy efficiency looking for new innovative solutions. Solar impulse is a 90-employee company with the goal to create a solar airplane capable of flying powered only by solar energy; looking for a partner with the right technical know-how and investment opportunities.

for equity partnership and requires management attention due to capital investment but it provides also potential synergies between the partners; it can be shown through an IP investment or partnering with new start-ups. An example of this specific type of partnership is given by Mamma M'ama and Volan Way partnership vastly displayed in the next chapter.

4. Strategic Innovation Partnership and JV is a collaboration to co-develop and advance innovations through a capital investment that provides more control on the partner's entire innovation lifecycle. It obviously requires management attention due to capital investment and reputation risk deriving mostly from the possibility of co-branding. Examples are joint ventures, but also joint development and co-marketing and/or co-distribution. DSM⁴¹, after a first collaboration agreement based on in-kind investments, created a JV with Niaga, a Dutch start-up founded in 2010 with 4 employees. The collaboration was built on the mutual vision of providing sustainable solutions in the materials industry, and became a joint venture when the bigger company understood the importance of stability for the smaller one in order to reach stable businesses. More than ten patents were created in two years.

3.3.3. Environmental context

High-speed environment and constant technological development are building blocks of our economic era. During the last decade, de-regulation and demolition of boundaries are continuously opening new markets and new possibilities of creating partnerships. Accordingly, this environment is characterised by a strong uncertainty, caused by potentially disruptive technologies that may change the course of the emergent markets at any time.

Innovative small firms provide a new approach on innovation that creates an attractive value added for large corporations that look for innovative partners to face new competitive challenges. These research and implementation of new partnerships are opened to many options thanks to the global nature of the actual marketplace. In addition to fast technological progress, the liberalization and deregulation of markets have accelerated the global competition and amplified the availability of venture capital. Nowadays, developed countries are trying to support new ecosystems to facilitate a small-large firm collaboration, as a

⁴¹ DSM is a global science-based company active in health, nutrition and material sectors, looking for recyclable carpets material which was the exact sector of Niaga, that, instead, had the necessity to find a collaborator with capital and know-how resources.

recovery tool for SMEs and as an innovative opportunity for incumbents. Empowerment of collaborative innovation through government commitment; education across policy-making agencies focused on business communities dedicated to innovation modes; and enablement of collaborative innovation within *ad hoc* infrastructures devoted to legal and regulatory support⁴², are just few examples of initiatives directed to a more informed environment in which small or large firms are aware of the possibilities of enhancing their position through asymmetric partnerships.

The Minister of Economy and Finance of Italy⁴³ has designed a tax credit strategy, with the aim of stimulate the increase of investments in research and development until 2019. It is a governmental initiative part of a finance framework to push recovery strategies for SMEs and consider them as start-ups from the point of view of accessibility to benefits. The purpose of the collaboration with other partners, such as associations and stakeholders, is to create a sort of network of innovation and entrepreneurship with the state support.

3.4. Management of Collaborative Asymmetric Partnerships

Management of asymmetric partnerships is very challenging for both parties. Difficulties that a company must face in order to collaborate are numerous, and most of them are related to the *modus operandi* of the other actor in the alliance; the degree of autonomy of both; and the innovation management itself. Those areas of conflict are a consequence of some specific risks, which derive from internal rivalry, knowledge barriers and communication problems. Starting a collaboration doesn't imply a complete trust in the companies involved, since an opportunistic behaviour may result in the accomplishment of self-interest (Comi & Eppler, 2009), and knowledge transfer could represent a further obstacle and become an issue if the differences of knowledge base, company background and managing structures are deeply present.

⁴² These are initiatives suggested by a paper by The World Economic Forum. (2015). *Collaborative Innovation Transforming Business, Driving Growth*, in which are extensively explained.

⁴³ Actually headed by Pier Carlo Padoan, since 2014.

3.4.1. Challenges

Challenges referred to asymmetric partnership management can be divided into three macro categories in order to match them with the three phases for the implementation of the alliance. These steps, extensively explained above, are called: Prepare, Partner, and Pioneer. Each step presents some typical problems in which partners can run into, during the construction and maintenance of the arrangement.

Throughout the *Preparation step*, one of the most important challenges, which sometimes are forgotten by firms, is to enunciate clearly the aims both parties want to achieve. This simple passage is fundamental in order to understand reciprocal needs, ensuring that employees who are working together have a profound comprehension of the necessities of the company, and, thanks to this awareness, be able to support the entire negotiation process. While making the value-creation strategies visible to the partner, both firms should analyse all possible risks and be conscious of the possibilities of failure. However, all this unambiguousness could have an opposite defensive reaction due to the aggressive perception to new ideas the employees can have. Therefore, in order to avoid such a negative feedback, small and large firms should pursue a behavioural alignment among all departments of the firm in order to make sure everyone supports their collaboration. For instance, whether both parties are not united in this sense, there might be a lack in joint design and the alliance designing process becomes the outcome of only one of the firms involved or a third-party. According to the necessity to be aligned, it is fundamental to "speak the same language" (World Economic Forum, 2015), namely, have a common way of communicating, in order to have clear knowledge transfer and complete trust; this problem of communication is of main importance in order to avoid useless paranoia. In terms of paranoia, technological details have a central role while speaking of asymmetric innovative partnerships, and start-ups might be reluctant to share such information without a previous agreement, and the tensions created by such behaviour can be legitimated from the underprivileged position of SMEs, but might also be an obstacle for a proper collaboration construction and preservation. Accordingly, while preparing an asymmetric partnership, both firms must communicate to each other, and try to modify their mindset during the decision-making processes and accept constructive feedback from the other side.

During the *Partner phase* stakeholders could be worried about the SME's capability of managing the partnership due to the increasing complexity when dealing with multiple

commitments. These challenges are a direct consequence of a huge difference related to cultures. Behavioural approaches differ between partners and affect structural and organizational conduct, not only in terms of management of the informal relationship but also for what concerns resources and finance. On the one side, constraints of an incumbent large enterprise are reasonable if we think about the difficulties for a small partner in ensuring financial stability and in being prepared to due-diligence checks. On the other side, an important challenge for larger actors is to work with legal teams in order to fulfil the necessary flexibility in the contract while pursuing a constant awareness of the risks. In the creation of an agreement, mainly for an asymmetric partnership, it is easy to fall into the "51% fever" (Comi & Eppler, 2009) for which there is the common belief that stronger part has got control, in our case the incumbent. In contrast, with the aim of building a successful alliance, they should balance the aspiration for full control; and, small and medium-sized enterprises, should balance between giving up control and obtain access to resources. This equilibrium stands also in the consciousness of risks, avoiding proficiency arrogance, and the belief of being the best, even in the area of the other's expertise, and, on the contrary, research the consultancy of expert advisors to pursue win-win collaboration. All the difficulties already taken into consideration emerge from the phase of selection of the partner, but, the most evident difference is in the degree of flexibility; large enterprises must move quickly enough to maintain the interest of the young firm, even in the negotiation phase and during the partnership. An example of negative management is referred to the incapability of conversing fast face-to-face; that might result in "inbox indigestion" when, in order to foster speed, all communication takes place through e-mails and letters. Flexibility concerns also differences of time frames, as a consequence, a challenge for both parties is to understand timing of the other and shape negotiations over a longer or shorter time period in order to move to the same direction.

The last phase of an asymmetric partnership is related to what we have called *Pioneer*. This step considers all challenges due to the preservation of a successful collaboration, without leading to a loss of direction constantly adding new goals or, on the contrary, keeping to an agreement that is past in time. Arrangements need to be adapted also in order to provide continuous commitment to collaborations from all levels of both firms. For example, it is possible to create collaborative cross-organizational teams in order to realize additional value for the partnership or create incentives for managers who support cooperative behaviour but avoiding the mistake of entering in equity addiction through recompenses to create

commitment. Balancing the relationship must be a prerogative for all stages of the alliance, and should cyclically be revisited in order to avoid opportunistic behaviours; that aren't only typical of large enterprises, but can be also affect smaller partners when the first abuse of brand image to enhance their reputation. Pioneer is the last but the most perpetual phase due to the necessity to adapt; this is the reason why in this step of a partnership both parties should decide whether to implement a "plan B" that must be taken into account earlier, in case of failure.

4. EMPIRICAL EVIDENCE

This chapter gives evidence for the entire previous considerations across an empirical study. The analysis is obtained through a personal research based on a questionnaire submitted to SMEs and start-ups in the Italian country and some interviews with actors in *Collaborative Asymmetric Partnerships*. The people involved are representatives of two accelerators, five start-ups and four medium-large companies.

After having analysed all the data, the purpose of this chapter is to compare the answers and perceptions of companies with evident differences in size, market position and resource portfolio, in order to confirm the previous considerations about which are the mistakes that must be avoided to build a successful collaboration and give some suggestions to overcome this barriers. Through the interviews below, the importance of such partnerships will become evident thanks to all the personal experiences described.

"A recent research by "Osservatori Digital Innovation 44" displays that, during the next three years, all traditional sources of innovation will see a downturn... while the use of other sources of innovation will increase even if they had a minor impact till now: internal units of research, Universities, Research centres, clients, other sectors' firms, and especially start-ups whose preference will increase from 4% to 16%."

Luksch A., Director of Osservatorio Startup Intelligence, 2017

For larger enterprises, using the employment of innovative SMEs as a source of innovation has never been so crucial; foster closer working relationships between asymmetric partners led, in particular, to innovative solutions, product differentiation and renewed services within the larger company together with advantages for smaller businesses such as producing better sales and supply chain opportunities (Bannerjee, S.Bielli, & Haley, 2016).

⁴⁴ Osservatori Digital Innovation is a department of the Polytechnic School of Management of Milan that works in the field of research in Digital Innovation.

4.1. PLATFORMS

Benefits deriving from asymmetric partnerships are clear, and vastly examined; however, the presence of a multitude of corporations and SMEs who may want to start such an alliance make the research of the right partner extremely challenging. For this purpose, some organizations have been built in order to simplify the match of asymmetric companies with complementary objectives: platforms that assist large and small enterprises in such collaborations. Businesses, universities, accelerators, incubators, policymakers and institutional investors compose these organizations that usually have strong relations with SMEs' societies and entrepreneurs; thus, they are able to address companies to the correct partner.

Nowadays, companies are proficient at providing consultancy also in the field of innovation, namely, in the collaboration with incumbents which want to find an innovative perspective through the engagement with start-ups. An example of platform built to provide assistance to launch innovative initiatives is the Londoner *Founders Intelligence*. It is a specialist consultancy firm with worldwide reputation that offers a complete support, from designing the large company strategy, to selecting the small partner, and managing the relationship.

Tech-Marketplace is an Italian successful example of digital platform (Bank Intesa Sanpaolo in collaboration with Confindustria Piccola Impresa sustains it by making available an entire national network); as a digital matchmaking place, it collects technological supplies and demands, besides support enterprises in the exploration of new business solutions while, at the same time, start-ups and technology suppliers are helped find available network representatives. As a result, this platform's aim is the creation of new commercial agreements, partnerships, investments and acquisitions.

As stated before, there are many different structures whose functioning is related to the match of innovative demand and supply. In order to facilitate it, some businesses are structured on behalf of supporting new ideas contributing in their development. *Incubators* are organizations that implement the process of creation of new businesses, providing them with all the instruments and support services like working spaces, activities for the development of businesses and integration opportunities and networking. Instead, *Accelerators* take part in the very first life stage of a new business and support it with mentorship services, physical spaces where to develop the ideas, and all the services

necessary for the development of the firm. It is mainly managed by entrepreneurs, mentors, and investors who give assistance in the creation of business models.

Accelerators are a growing player in the start-up community and are positively affecting the connection between partners, facilitating the access to corporates for SMEs and increasing the credibility of start-ups in the marketplace. Organisations like *Sartupbootcamp* accelerator are innovation networks with the aim to create interest and awareness of the possibilities of SMEs. *Index Ventures*, instead, represents an example of investors who are enabling the success of SMEs demonstrating the possible benefits from an asymmetric partnership⁴⁵. It develops many initiatives, such as seminars and roundtables, in order to clarify the opportunities of an incumbent when partnering with a smaller enterprise.

In addition, also policymakers might have an important role in the facilitation of an asymmetric collaboration. *Startup Europe Partnership* aims at offering a European platform to help the best start-ups emerge from local ecosystems, and scale-up. They work with European and non-European corporates interested in collaborating in the open innovation system; and they also connect investors and accelerators who want to join the collaboration. SEP is a European Commission initiative whose programme is run by other organizations such as *Nesta*, *Mind the Bridge* (in Italy and US), and *The Factory*.

"Europe has made huge progress in terms of becoming an ecosystem for starting a start-up, but where we lag behind is in scaling them. Start-ups need help to work and expand across Europe, which we try to do. This is why the European Commission is very supportive of SEP as a programme that can hopefully help Europe become also a great place for scale-ups."

Alberto Onetti, Chairman at Mind the Bridge, 2015

4.1.1. Innovation Center

Intesa Sanpaolo Group has glimpsed the potential of innovative solutions since the very first after-crisis scenario, dedicating resources in the creation of a new Italian ecosystem focused on innovation. On the one hand they invest in promising technologies through Venture Capital; on the other hand they are an accelerator that works in order to match qualified investors and start-ups. Through the Innovation Center, Intesa Sanpaolo wants to

⁴⁵ Index Ventures is one of the Europe's leading VCs that invested in Asos, BlablaCar and Skype.

attract innovative ideas and renew the concept of bank using technology as a strategic tool of growth and becoming a convergent centre of innovation in both supply and demand. It is an excellent example of acceleration of start-ups in which the existing networks of a bank with national presence are used in order to foster asymmetric partnerships reinforcing the role of entrepreneurs in Italy. Located in a building designed by Renzo Piano in Turin, and directed by Maurizio Montagnese, chief innovation officer, Innovation Center was set up in 2014 in order to collect in one place all innovative activities of the bank (Di Lucchio, 2016).

Thanks to the contact with Carlo Cavedon⁴⁶, "Area Chief Innovation Officer - Network and Innovation Culture", I had the opportunity to understand closer the functioning of this accelerator constructed around a bank institution. The people working in the "Center" constantly monitor the most interesting not only Italian start-ups; once identified the selected ones, they analyse the opportunities in the market and create prototypes, new products, new services to be presented to international relevant investors after a period of training and preparation with the purpose of facilitating the connection between entrepreneurs and companies. The bank can already offer a vast network and it is already involved in partnerships with other international institutions active in the development and acceleration of start-ups.

"Innovative start-ups and SMEs, if helped in their development stage, can become an important heritage to the future support of medium-large enterprises, because they can give faster market responses and innovative and competitive solutions to new international needs"

CAVEDON C., AREA CHIEF INNOVATION OFFICER AT INTESA SANPAOLO, 2016

Once developed and sustained new start-ups, *Intesa Sanpaolo* gives the opportunity to present the ideas through, as an example, *Start-Up Initiative*⁴⁷ events. I personally participated to *StartUp Initiative Fashion & Design 2016*, the 29th September 2016, in Milan at Palazzo Belgioioso. After a brief introduction regarding all the important investors present there, the start-up selected by the acceleration program showed through a presentation their projects, ideas, and new market perspectives, besides answering all the questions involving more concrete values about timing of production, investment needs, and future expectations. What

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⁴⁶ Mr. Cavedon was interviewed on 29th September 2016. (Camilla Sforza, Interviewer)

⁴⁷ Start-Up Initiative is a comprehensive program aimed at technology start-ups looking for concrete business opportunities: every few months, a strict selection and training process leads the best start-ups to high-profile, technology-specific events called Arena Meetings, where they can meet international investors and corporations (Intesa SanPaolo SpA, 2014).

was clear from the first presentation beyond was the idealistic approach of start-ups compared to the more practical-industrial intervention of established financiers. Accordingly, as an observing guest, I could perceive the higher interest all investors had in the start-ups with a more solid organization and analysis of future scenarios and cost-related estimations.

Furthermore, a great example that Mr. Cavedoni introduced me to, was the partnership between *Voltan Way*⁴⁸ and the start-up *Mamma M'ama*: it is a new idea that started to become real thanks to a first investment by *Intesa Sanpaolo* and, successively, participated in a *StartUp Initiative* event. The interview with Sonia Litrico, *Mamma M'ama* co-founder, is presented in the paragraph below.

4.1.2. Fashion Technology Accelerator Milan

Fashion Technology Accelerator Milan is a management-consulting firm, part of an international network. The first FTA office was opened in Silicon Valley in 2012, and, in 2013, FTA decided to expand globally, setting up two additional offices, in Milan and Seoul. It provides business acceleration to start-ups and young enterprises operating at the intersection between the industries of fashion and technology.

"Our particular and strong focus on Fashion & Technology enables us to offer tailored advisory, industry-specific services, valuable business development insights and opportunities with potential partners and customers."

FASHION TECHNOLOGY ACCELERATOR MILAN, 2017

FTA was one of the guests during the event I attended in September: *StartUp Initiative Fashion & Design 2016*. Marco Filocamo⁴⁹, FTA Head of Start-ups, showed-me the steps of their work and the most common challenges for both start-ups and large companies he had faced. Selection, Acceleration, Capital, and Exit are the four phases a start-up must sustain with FTA. The selection phase is carried out through standard investment criteria: teams instead of a single person start-up, previous entrepreneurs experiences and a refined product are preferred features. The acceleration normally takes six months in order to become mature; FTA doesn't use a standard approach but creates a structure *ad hoc*, even digitally, if the start-

⁴⁸ It's an Italian company with 80 years of experience, 80 ml € turnover, and 400 employees in 4 production sites in Veneto and Lombardia (Voltan Way, 2017).

⁴⁹ Mr. Filocamo was interviewed on 6th January 2017. (Camilla Sforza, Interviewer)

up is not Italian. The acceleration includes: reporting, marketing, branding, and fund rising and often with the external advisors' support.

"The hardest part for start-ups in the implementation of their product in the large enterprise. To be commercially ready for the market doesn't mean just to present an idea in front of possible investors."

FILOCAMO M., HEAD OF START-UPS AT FASHION TECHNOLOGY ACCELERATOR MILAN, 2017

"It happens that Start-ups do not read up enough about the companies they may be involved with" (Filocamo, 2017). Reassured by the innovative idea they want to propose, they lack in market-readiness in terms of awareness of solutions already implemented by the investors, and don't shape their implementation.

"Big companies main challenge is in the identification of the right representative. The size of the innovation department creates unclearness because of a complex structure in which nomenclatures and roles don't always permit to reach the effective person with a sufficient hierarchical decision-making power."

FILOCAMO M., HEAD OF START-UPS AT FASHION TECHNOLOGY ACCELERATOR MILAN, 2017

Furthermore, as Mr. Filocamo stated during an interview, nowadays there is another huge reason of slowdown in the collaboration between asymmetric partners that derives from the reputation of start-ups. All the advertising of the Start-up concept of innovation may have created an opposite effect on established companies. As a result (as all the medium-large companies I have interviewed confirmed), consistently talking about start-ups has led to a sense of underestimation of professionalism and reliability.

4.2. START-UP SURVEY AND INTERVIEWS

The Start-Up Survey⁵⁰ paragraph presents the results of a questionnaire submitted to 40 Italian start-ups and the comparison with some start-up interviews.

All contacts of firms who have completed the questionnaire come from the website www.startup.registroimprese.it, it is a database of all innovative SMEs and start-ups officially recorded in the registry of Italian businesses⁵¹.

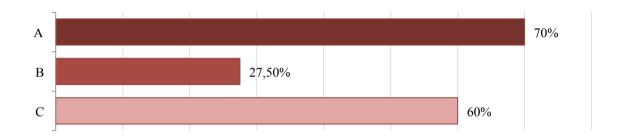
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⁵⁰ The survey questions can be found in **Annex IV**.

4.2.1. Results

The 97,5% of the start-ups in the questionnaire⁵² are autonomous businesses, with a number of employees between 0 and 10 and an annual turnover or annual balance sheet total $\leq \in 2$ million. In the website dedicated to innovative start-ups the *Ministry of Economic Development* has underlined some of the characteristics that represent innovativeness in this special form of enterprises.

FIGURE 24 – INNOVATION INDICATORS



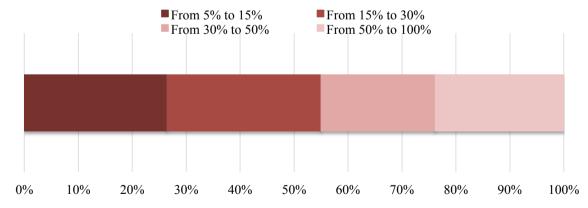
Source: Author's survey.

Notes:

- A: 2/3 of the staff (employees or collaborators) has attended a second cycle degree program;
- B: the company is the owner or licensee of at least one patent related to industrial, biotechnological invention, to a topography of semiconductor product or a new plant variety;
- *C: the business objective is primarily or exclusively the technological innovation.*

The ratio between total costs and costs in R&D is fundamentally important in order to understand how start-ups can be a source of innovation also for large enterprises.

FIGURE 25 – PERCENTAGE OF R&D ON TOTAL COSTS



Source: Author's survey.

⁵¹ For a detailed table on the start-ups that completed the questionnaire see **Annex IV**.

⁵² The survey questions can be found in **Annex V**.

As figure 25 shows, all start-ups analysed have a percentage of R&D on total costs greater than 5%, nearly the 75% of all surveyed has an impact of research and development over 30% on total costs, and one third of this 75% confirmed that their department effect more than 50% of total costs. The investment in innovation proved to be one of the major aim of such organizations.

Before asking all details about *Collaborative Asymmetric Partnerships*, I analysed which could be, for both SMEs who have already tried this type of collaborations and SMEs who haven't, the reasons that could drive such collaborations. The graphs below demonstrate how some aspects are extremely important as driving forces of the need of such collaborations: *Innovate, Improve Market Position, Increase Efficiency*, and *Internationalize*, appear to be the fundamental reasons.

Not at all A little Sufficiently Highly Extremely

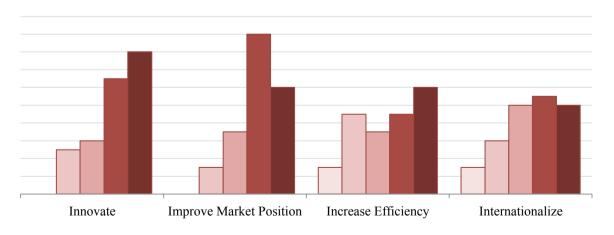
Share Costs

Share Risks

Share Resources

Share Revenues

FIGURE 26 – REASONS TO BUILD COLLABORATIVE ASYMMETRIC PARTNERSHIPS

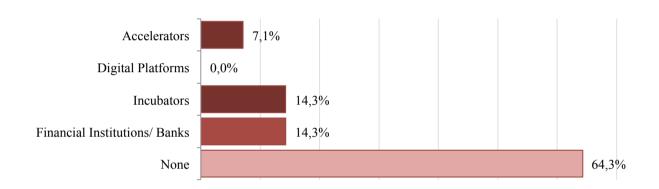


Source: Author's survey.

Even if *Share Revenues* and *Resources* appear to be relatively important reasons to build Asymmetric Collaborations, share *Costs*, and *Risks* are, obviously, moved to the background. Accordingly, together with *Innovate*, these are driving reasons for Large Enterprises to build the types of collaborations studied in this thesis.

Throughout the questionnaire, I analysed how start-ups normally meet their bigger collaborators and how, if they do so, they evaluate the degree of compatibility with them. As vastly explained before, there are various platforms and external actors that can facilitate the matchmaking of two partners.

FIGURE 27 – USE OF PLATFORMS



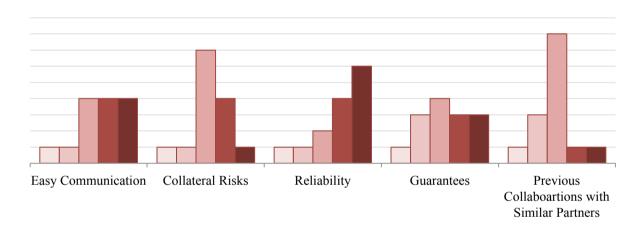
Source: Author's survey.

The vast majority of the surveyed start-ups declared that no one of the possible external tools was utilized to meet possible partners, on the contrary, the research of collaborators had depended primarily on "Already known people" or "Events I casually attended". The sample of the study, from different parts of Italy, demonstrates that, even if a lot of different instruments and platforms already existed, not all the start-ups involved knew about the presence of such organizations in Italy.

Trying to meet a possible collaborator, SMEs can evaluate the opportunities and select what they perceive to be the most suitable partners. *Complementary Competences, Available Resources, Compatible Objectives, Cooperative Attitude,* and *Reliability* emerged as the most important factors that drive that decision. Other factors do not have particular relevance, possibly because of the bargaining power of bigger enterprises; a start-up is not likely to have the resources to evaluate the financial position and guarantees of incumbents.

Complementary Available Resources Due Diligence Compatible Cooperative Attitude Objectives

FIGURE 28 – PARTNER SELECTION PARAMETERS

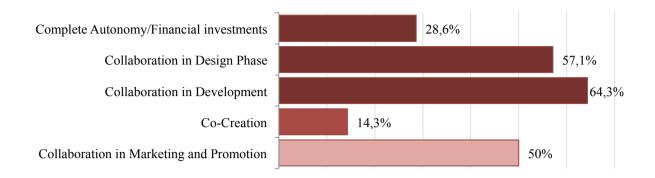


After having analysed pre-collaboration aspects that characterise the start-ups surveyed, the next graphs start to describe the actual features of the *Collaborative Asymmetric Partnerships* they were involved in.

Almost all the collaborations analysed were long-term partnerships and all start-ups that answered had already collaborated with larger companies once, twice or even more times. The following data are related to the collaborations they considered the most significant (because they were more successful than others or because the partner was more important).

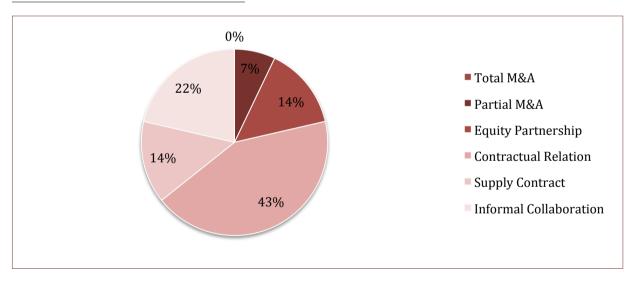
First of all, the degree of autonomy during the collaboration define whether they are co-creative partnerships or mere supply services. As figure 29 shows, nearly one fourth of start-ups work in complete autonomy, and, in contrast, just the 14,3% have a complete co-creative partnership in all phases of the design, development, marketing, and promotion.

FIGURE 29 – DEGREE OF AUTONOMY



Considering the classifications done in the previous chapter, the graph below displays the type of collaboration, when asymmetric, about which the start-ups were surveyed. Even if more than 35% of them had a *Supply Contract* or an *Informal Collaboration*, the vast majority represented *Contractual Relations, Equity Partnerships*, and *Partial* or *Total M&A*.

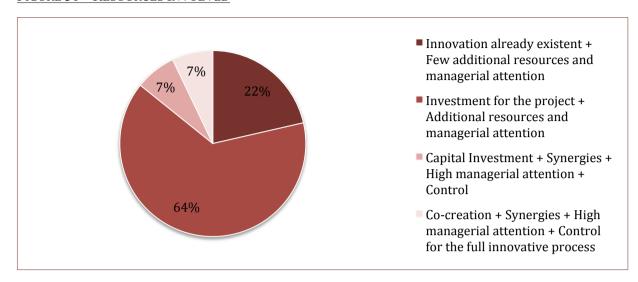
FIGURE 30 – TYPE OF COLLABORATION



Source: Author's survey.

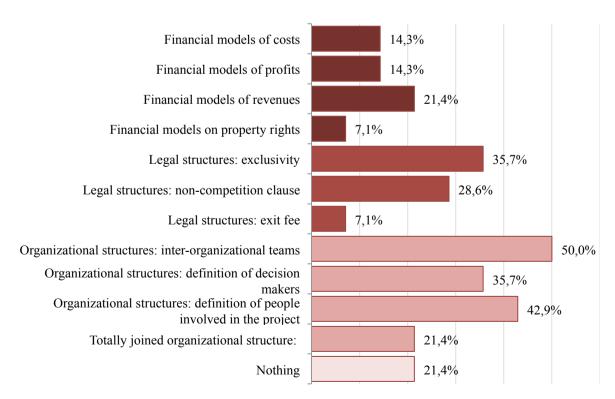
The survey displays also the degree of resources involved compared to the level of development of the Innovation related to the *Asymmetric Partnership*. The vast majority of the partnerships in the survey (64%) are related to an investment for a specific project in which additional resources and considerable managerial attention are involved.

FIGURE 31 – RESOURCES INVOLVED



In this type of collaborations it is extremely important to clarify all objectives and risks of both partners and create a Business Case complete of Vision, Mission, Strategy and Business Plan in which all departments of both enterprises involved are completely and actively proactive for everything that may concern the collaboration. Accordingly, in order to prepare the collaboration to all possibilities, some formal structures are necessary.

FIGURE 32 – FORMAL STRUCTURES OF THE COLLABORATION



Source: Author's survey.

Figure 32 shows all formal structures that have been adopted in *Collaborative Asymmetric Partnerships* between two partners. Even if financial models are normally highly recommended in order to have a future perspective of possible trends, all *Organizational Structures* are the most used together with *Clause of Exclusivity*. Marco Filocamo, Head of Start-up at Fashion Technology Accelerator, underlined the difficulty to effectively find, during the time of the collaboration, the right representatives to talk with, that were not only strong in the field of partnerships but also decision-makers. However, the sample analysed, has always constructed solid organizational structures: inter-organizational teams, definition of decision makers, definition of people involved in the project. Consequently, there shouldn't be any difficulty to communicate and identify the right people. On the contrary if we analyse the changes that partners have done during the collaboration, the most relevant are exactly in the field of organization and, as the survey and the next figures will display, some of the most relevant difficulties highlighted are communication and increasing complexity of the collaboration.

Accordingly, even if both partners have almost always used solid Organizational Structures, *Asymmetric Partnerships* have the constant need to be monitored in order to be flexible and to adapt to changes that certainly can occur while working with such different partners. Some of the start-ups surveyed explained that the monitoring among partners was only built with "*Reports and Final Evaluation*"; although others had a more active behaviour with "*Periodical meetings, feedbacks and step-by-step development monitoring*" also through informal communication, e.g. non-official texting and e-mailing.

The next table (number 8) finally displays all challenges that occurred, or might occur, while collaborating with a larger partner. Not all the start-ups surveyed had already tried to collaborate within this type of partnership; consequently, it was possible to compare the areas in which they were expecting to find some obstacles, to the effective disadvantages created by some challenges highlighted by start-ups that had already been a partner in a *Collaborative Asymmetric Partnership*. The table lists all possible categories of complication, then, reports percentage of relevance for both start-ups that had and hadn't already had this collaboration. The darkest colour is used to highlight the categories in which both expected challenges and effective challenges were observed. Dark pink is used to underline relevant features expected or experienced; and light pink only to evaluate *Knowledge Share* and *Technology Share* which were expected to be relevant but were actually of considerable importance.

TABLE 8 – CHALLENGES IN COLLABORATIVE ASYMMETRIC PARTNERSHIPS (CAP)

CATEGORIES	EVALUATION BY SMES THAT <u>HAVEN'T</u> DONE CAP	EVALUATION BY SMES THAT <u>HAVE</u> DONE CAP
Behavioural alignment in all departments	34,6%	42,8%
Increasing Complexity of the collaboration	11,5%	62%
Internal Flexibility	3,8%	35,7%
Adaptability	7,7%	47,6%
Communication	26,9%	42,8%
Joint design of the collaboration	38,5%	50%
Understanding of reciprocal needs	38,5%	33,3%
Possible risks analysis	0	31%
Possible failure awareness	0	54,7%
Knowledge share	15,4%	54,7%
Technologies share	15,4%	57%
Partner Flexibility	34,6%	71%
Different Timing	46,2%	85%
Professional Arrogance	46,2%	47,6%
Balance of degree of Control	30,8%	38%
Reliability	15,4%	45%
Reciprocal commitment	0	57%
Opportunistic behaviour	38,5%	69%

Different Timing appears to be the most important challenge to overcome in both expected scenario and effectively reported experiences. Large and small enterprises have different structures, organizations, and processes; all these characteristics cause evident practical unbalances for what concerns the time that might exist between phases of the same process or reactivity in answering to changes. Other three aspects that are actually very challenging were also considered relevant by start-ups that haven't done collaborations with asymmetric partners: Partner Flexibility, Opportunistic Behaviour, and Joint design of the collaboration.

The same comparison has been constructed for what concerns expected and effectively experiences advantages of *Collaborative Asymmetric Partnerships*. Table 9 displays that there is a balance between start-ups that have and that haven't done CAP in the field of *Networking*, *Access to Marketing expertise*, and *Access to Brand & Power reputation*. Other advantages, such as have *Access to Financial Resources* or *Sales Expertise*, were expected to be extremely relevant but didn't show the same importance in the evaluation by SMEs which have already done *Collaborative Asymmetric Partnerships*.

TABLE 9 – ADVANTAGES IN COLLABORATIVE ASYMMETRIC PARTNERSHIPS (CAP)

CATEGORIES	EVALUATION BY SMES THAT <u>HAVEN'T</u> DONE CAP	EVALUATION BY SMES THAT <u>HAVE</u> DONE CAP
Access to financial resources	65,4%	14,3%
Solution to critical size	15,4%	21,4%
Decrease of risks	46,2%	14,3%
Access to deep-rooted processes	15,4%	35,7%
Access to Marketing expertise	38,5%	42,9%
Access to Sales expertise	61,5%	28,6%
Access to Managerial expertise	29,9%	35,7%
Access to Regulatory expertise	15,4%	21,4%
Brand power & Reputation	34,6%	35,7%
Institutional legitimacy	19,2%	14,3%
Networking	65,4%	57,1%
Dynamism	11,5%	0
Access to sources of innovation	19,2%	35,7%
Access to lean processes	7,7%	7,1%
Rejuvenate corporate culture	11,5%	7,1%
Access to new skills	3,8%	42,9%
Access to new technologies	19,2%	28,6%
Awareness of future trends	3,8%	21,4%
Closer to clients and customers	15,4%	35,7%
Access to potentially disruptive outcomes	19,2%	21,4%
Quicker answer to market changes	15,4%	7,1%
Access to niche competences	11,5%	28,6%

4.2.2. Interviews

Mamma M'ama is a start-up located in Milan, Sonia Litrico⁵³ is one of the three founders (Erica dalla Bianca and Sonia Matteoni) and sales manager of the company. *Intesa Sanpaolo* operated as an accelerator and, through *StartUp Initiative*, made it possible to meet *Voltan Way*, which became a main partner with whom it created a Collaborative Asymmetric Partnership. Mamma M'ama products consist of completely bio and ready to eat weaning food for babies between 4 and 36 months.

"We realized that the sector of child-food lack of something really important: apart from some local examples, in Paris and London, in Europe didn't exist a complete and fresh meal that children could eat instead of industrial baby food. Then we decide: let's do it ourselves!"

LITRICO S., SALES MANAGER AT MAMMA M'AMA, 2016

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⁵³ Mrs. Litrico was interviewed on 17th October 2016. (Camilla Sforza, Interviewer)

The very first aim of this start-up was to create an alternative, but without financial support it was impossible. *Voltan Way* represents an important partner in order to share costs and decrease risks. "When a company is that small, it's hard to even dream of satisfying the demand" (Litrico, 2016). Ms Litrico underlined the necessity to overcome size-related problems and the important advantage they gained while sustained by a partner with institutional legitimacy and a powerful brand.

In this case, *Voltan Way* established and equity partnership (with the ownership of 20% of the start-up) in which they can count on the bargaining power. In other words, Mamma M'ama is a new-born in the food sector and actually needs directives from the contractual point of view or for what concerns more technical aspects, like the construction of a business plan; either way, each decision is discussed together throughout commercial meetings and daily informal communications in order to be constantly aligned. Marketing and communication are done exclusively by Mamma M'ama, internally.

Ms Litrico highlighted the incredible work that their partner is doing in order to coordinate different timing, clarify established companies processes, and establish a collaborative environment of proactive behaviour. But, how can all this be possible with such differences? "Our win-win partnership is built on complete trust, we were lucky to find collaborative people able to understand our needs and completely positive in their approach" (Litrico, 2016).

Babylon cloud is a start-up located in Rome, Alessandro De Losa⁵⁴ is the founder and CEO of the company. Founded in 2014, its aim is to implement Cloud services with higher usage flexibility. Customization and vast range of services empower their core business and, in 2016, they were able to develop Babylon Box, a machine that could be equally used as a Cloud storage stand-alone server and as a scalable, resilient and geographically distributed infrastructure. Mr De Losa had previously worked in 3 multinational companies and had collaborated with tens of other companies during his career; thanks to his experience he is clearly aware of all reasons that could drive collaborations and all challenges that might occur.

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⁵⁴ Mr. De Losa was interviewed on 12th January 2017. (Camilla Sforza, Interviewer)

Babylon Cloud's market is B2B, related to a corporate/large enterprise target; for a small start-up, even with fresh, innovative solutions, it is not easy to increase its market position in this particular sector. Asymmetric Partnerships are, in this case, the only valuable solution because large corporations can guarantee reliability, financial robustness, and technological confidence. Furthermore, one of the most particular aspects of this sector is the possibility of a sudden increase of demand and turnover.

> "Having a great idea isn't enough. A financially solid corporation, with operative skills that can guarantee quick problem-solving, could be the only solution to sustain a rapid increase in demand."

DE LOSA A., CEO AT BABYLON CLOUD, 2017

The contracts stipulated in this field are usually simple supply agreements, but, they can easily become equity partnerships; however, the design and development of innovations is rarely based on co-creation. Babylon Cloud had the opportunity to be involved in an Asymmetric Partnership with Infordata, solutions provider in ICT market. Their collaboration seems to be already successful, thanks to management predisposition to innovative ideas and, after a presentation and a Proof-of-concept purchase, to their commitment. Mr De Losa highlighted how the mere investment could be enough, but how proactive attitude, behavioural alignment in all departments, and participation of all managerial levels could effectively instil reciprocal trust: "It is a rare case in which a corporate has a future-oriented *vision*" (De Losa, 2017).

The spheres in which Babylon Cloud's CEO, in his experience, has encountered difficulties while collaborating between asymmetric partners, are timing and flexibility. For what concerns timing: "For us, six months are an eternity, we can redesign the entire product. For a large enterprise six months is tomorrow" (De Losa, 2017). Moreover, collaborating with a larger company can create challenges deriving from procedures, processes, and authorizations. "We must adapt to their systems, their contractual schemes, their commercial forms" (De Losa, 2017).

Alta Manifattura Cosmetica is a start-up located in Vico del Gargano, near Foggia, specialized in the production of ingredients for cosmetics and realization of cosmetics. It currently collaborates with many Italian Universities for what concerns R&D; particularly with "Perugia University" and "Ferrara University" where they test their products.

Michele Carnevale⁵⁵, who was my contact with AMC, enlightened which are the main causes that could drive *Asymmetric Partnerships* and all challenges they already faced. On the one hand, collaboration with asymmetric partners could be extremely convenient in order to gain economies of scale and solve dimensional problems, share costs and foster co-creations with the purpose to give a faster answer to market needs. On the other hand, "*The evident differences in timing between SMEs and large enterprises could become a huge problem*" (Carnevale, 2016).

AtBoat is a start-up located in Latina, Stefano Melia⁵⁶ is the CEO of the company. It is a platform specialized in the sharing, offering or book, of catamaran yacht or sailing boat vacations that is currently working with an Incubator, Bic Lazio.

Mr Melia thinks that the support of a large enterprise could be extremely valuable; accordingly, he underlines the importance of the juxtaposition to Brand reputation because it would lead to enter new networks. However, he also thinks that several difficulties might occur while collaborating with an incumbent:

- Lack of awareness of reciprocal needs;
- Lack of "same language" / poor communication between partners;
- Opportunistic behaviour when technologies and know-how are to be shared;
- Lack of flexibility due to rigid structures and bureaucratized modus operandi;
- Professional arrogance: start-ups aren't really considered a source of innovation.

"Unfortunately, Italian enterprises aren't ready for open innovation because we are really underdeveloped in terms of innovation. Large enterprises are still very sceptical towards innovative start-ups and tend to manage all their processes old-style."

MELIA S., CEO AT ATBOAT, 2016

PowerSINT is a start-up located in Palermo that works in the field of software production and IT consultancy. Antonio Volpe⁵⁷, the Sales Manager of the company thinks

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⁵⁵ Mr. Carnevale was interviewed on 18th December 2016. (Camilla Sforza, Interviewer)

 $^{^{56}}$ Mr. Melia was interviewed on 7^{th} December 2016. (Camilla Sforza, Interviewer)

that an Asymmetric collaboration could give access to other investments thanks to the institutional legitimacy that PowerSint could gain; moreover, the access to commercial and marketing resources, networks, and sources of innovation could lead to a closer relationship with costumers and, consequently a quicker response to market changes. However the comprehension of reciprocal needs could become a barrier: "It's hard to overcome initial scepticism" (Volpe, 2017). Furthermore, creating collaborations means also to facilitate commitment between the partners and find the perfect balance among degree of control, professional arrogance, and different timing: "The human factor is essential" (Volpe, 2017).

4.3. INTERVIEWS TO MEDIUM-LARGE ENTERPRISES

The current paragraph reports four interviews I personally carried out with the representatives of: Electrolux Professional, Miroglio Group, Battistella Company, and Eclisse. The first enterprise is a worldwide leader in the field of home appliance; the second is an internationally known front-runner in textile and fashion; the third is an Italian excellence in the production of furniture systems, with 450 employees and an annual turnover $> \$ 60 million; the last, but not least, company analysed is a medium-sized Italian enterprise producing sliding doors systems with international presence and reputation.

4.3.1. Electrolux Professional

Electrolux is a Swedish multinational home appliance manufacturer, founded in 1919 and headquartered in Stockholm. It is ranked as the world's second-largest appliance maker per sold units (after Whirlpool). Electrolux products sell under a variety of brand names, including Electrolux Professional that has always been a global point of reference in the production and distribution of professional solutions for the Catering and Hospitality sector, it is the only company in the world with a comprehensive offering for Foodservice and

⁵⁷ Mr. Volpe was interviewed on 14th January 2017. (Camilla Sforza, Interviewer)

Laundry⁵⁸. Mr Graziano Lazzarotto⁵⁹ was Sales and Marketing Director for *Electrolux Appliances* between 2000 and 2012, and Business Development Grand Cuisine Consultant for *Electrolux Professional* between 2014 and 2015.

The Asymmetric Partnerships analysed during the interview were between Electrolux Professional, part of a world leader in appliances with its headquarter in Stockholm, with a turnover of \in 13 bn and 60.000 employees, and two SMEs, Arclinea and GeD cucine, both with a turnover < \in 50 million and < 100 employees.

"As Marketing Director (customer, trade, product) of Zanussi and then for Electrolux Appliances, I have managed many collaborations between multinationals and SMEs, and what I have experienced from all of them is that, particularly with Italian SMEs, an Asymmetric Partnership can only work in three specific fields: co-design and innovation, particular supply agreements, co-marketing."

LAZZAROTTO G., CONSULTANT FOR ELECTROLUX PROFESSIONAL BETWEEN 2014 AND 2015

Accordingly, the two collaborations refer to partnerships in the collaborative creation of marketing solutions. In order to find the possible partners, Electrolux Professional didn't use platforms, accelerators or incubators but, after a market analysis, used a direct contact through an external consultant. In the *Prepare*⁶⁰ phase many clarifications were implemented before the very start of the collaboration; namely, both objectives were exhaustively explained, all risks were investigated, vision, mission, and strategy of both partners and in the collaboration were clarified, and a Business Plan was constructed.

"Reciprocal interests from the very start of the collaboration and synchronicity among all people involved must be prerequisites for both SMEs and large enterprises. It's fundamental to deeply clarify mutual objectives, operative plan and timing in the partnership; all economic aspects, resource allocation and activities must be defined together from the beginning."

LAZZAROTTO G., CONSULTANT FOR ELECTROLUX PROFESSIONAL, 2017

Correspondingly, the *Partner* phase of effective selection, organizational options and resources allocation was punctually structured throughout: financial models of costs and profits, legal structures such as non-competition clauses, a totally joined organizational structure with the creation of inter-organizational development and innovation teams, the definition of all people involved in the project, and a plan of joined activities. Both

⁵⁹ Mr. Lazzarotto was interviewed on 2nd January 2017. (Camilla Sforza, Interviewer)

⁵⁸ All information's source is: www.professional.electrolux.it

⁶⁰ Refer to chapter 3, paragraph 3.3, for all differences between *Prepare*, *Partner* and *Pioneer* steps.

partnerships had rearrangements in the field of organizational structures due to the necessity to adapt to changes and follow the evolution of performances (Pioneer step); and, consequently, implemented a constant monitoring across the follow up of each activity step and specific initiatives involved. These successful Collaborative Asymmetric Partnerships were both constructed by Electrolux as investments for specific marketing projects in which both companies involved implemented constant co-creative behaviour thanks to the proactive alignment in all departments. Decrease of risks, access to easy and fast processes, quicker response to market signals, closeness to users and customers are only some of the advantages a large enterprise could gain when collaborating with SMEs or start-ups (Lazzarotto, 2017).

> "Asymmetric Partnerships give the possibility to get closer to niche markets with a huge added value without unproductive investments in fixed costs, thanks to the presence of SMEs. Large enterprises and/or multinationals tend to focus on mass markets and big clients, neglecting specific markets that might be strategically important to rejuvenate corporate culture and brand."

LAZZAROTTO G., CONSULTANT FOR ELECTROLUX PROFESSIONAL, 2017

Considering all his past experiences Mr Lazzarotto highlighted all aspects in which a large enterprise did actually have difficulties in the functioning of partnership with SMEs and start-ups.

- Behavioural alignment in all departments;
- Complexity and rigidity of decision-making processes;
- Adaptability;
- Joint design of the collaboration;
- Comprehension of reciprocal needs;
- Different timing.

The challenges underlined from Electrolux Professional's point of view can be divided in Internal and External barriers. Internal barriers depend on the personal readiness of the company to start a partnership and include: behavioural alignment in all departments, complexity and rigidity of decision-making processes, and adaptability. Behavioural alignment is a fundamental aspect that must be verified during the *Prepare phase* in order not to begin to collaborate without a complete proactive approach; differences in cultures and decision-making processes or organizational modus operandi might reflect the lack of behavioural alignment among departments and, consequently, intensify the lack of behavioural alignment between the two collaborating companies: "The approach of two

different organizations is essential, they already must cope with complex decision-making and organizational processes opposed to super-simplified ones" (Lazzarotto, 2017). Readiness and harmony between partners must be actively built before the collaboration starts.

"Collaborations are unsuccessful when results don't correspond to expectations, or, in other words, when the verifying deadlines are bring too forward. When there's no harmony among partners, the collaboration doesn't even starts."

LAZZAROTTO G., CONSULTANT FOR ELECTROLUX PROFESSIONAL, 2017

As a consequence, when objectives and resources aren't clearly arranged several problems might emerge: observance of timing (for a larger enterprise it is binding), nature of resources allocated and activities demanded (SMEs are usually more devoted to improvisation), unbalance among decision-making processes (SMEs are more flexible and tend to highlight the problems in coping with complex processes) (Lazzarotto, 2017).

4.3.2. Miroglio Group

Miroglio Group is an Italian company that has operated since 1947 in the textile and fashion sector, in 34 countries, with 49 operating companies and 3 production sites. Always observant of global market developments, the Miroglio Group can count on two important international partnerships: Ayaydin Group, one of the most prestigious and dynamic realities in the Turkish fashion sector, and Elegant Prosper Group, the Chinese leader in medium-high women's fashion. Investments in research and technological innovation in the last three years have exceeded 30 million euro helping to make Miroglio Textile one of the major European players. Its distribution strategy is multi-pronged and it owns, up to date, 1,200 single-brand stores, 5,000 trade customers with multi-brand stores and e-commerce channels⁶¹. Mr Giuseppe Miroglio⁶² is the President of Miroglio SPA.

The Asymmetric Partnership analysed during the interview was between Miroglio Fashion, part of Miroglio Group with a turnover of \in 650 million, and *Tailoritaly*, a start-up that works as a web platform in which to buy and customize women's clothes realized 100%

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⁶¹ Source of information: www.mirogliogroup.com

⁶² Mr. Miroglio was interviewed on 23rd October 2016. (Camilla Sforza, Interviewer)

in Italy: "On the website it's possible to choose the pattern, colour and decors." (Miroglio, 2016).

> "We are always searching new interesting businesses to develop. Last year (2015) we did it internally with TheColorSoup, start-up created with the collaboration of H-Farm⁶³, and this year we want to invest on Tailoritaly. The main focus is on the opportunity for interaction between digital and customization."

RANIERI L., MANAGER AT MIROGLIO INNOVATION PROGRAM, 2016

Tailoritaly was chosen in Milan at the annual Fashion Pitch of Decoded Fashion Milan⁶⁴ by Miroglio Group that frequently works with Accelerators, Incubators, and Financial institutions/Banks⁶⁵. During the *Prepare* phase both objectives were exhaustively explained, and vision, mission, and strategy of partners were clarified; many instruments were implemented before the very start of the collaboration: however, a business plan was built only at first in order to define the start-up value and than the collaboration was continuously monitored and adapted to changes.

> "We decided to set up a less forecasted work, and focus on day-by-day in order to give the start-up a more comfortable environment in which to be flexible and adapt decision-making without a binding business plan."

MIROGLIO G., PRESIDENT OF MIROGLIO SPA, 2016

The absence of a business plan was possible thanks to the presence of a particular management tool: Miroglio Group has on its inside a special division called Miroglio Innovation Program which has the specific aim to promote, encourage and facilitate internal innovation while coordinating start-ups and external innovative projects. The effective dayby-day coordination is done by the Project and Innovation Program manager with the person in charge of the management control.

For what concerns the *Partner* phase, Miroglio Group adopts the creation of inter-firm teams as the only organizational structure applied, however, inside this team, called Executive Committee, all other financial, legal and organizational structures are totally implemented. Approximately ten people compose the Committee, two of them are from the start-up

⁶³ H-Farm is a Start-up Accelerator, headquartered in Treviso province, working internationally in the field of web, digital and new media.

⁶⁴ Decoded Fashion Milan presented by e-PITTI.com is an international summit dedicated to fashion, digital and start-ups.

⁶⁵ Giuseppe Miroglio was one of the experts in charge of the evaluation of start-ups at StartUp Initative in Milan 2016.

involved in the collaboration, and the others represent all Miroglio business functions (Miroglio, 2016).

"Our group has acquired a relevant share of Tailoritaly, for this reason a complete framework agreement for managing the partnership exists. In any case, our aim is to discipline mainly the worst case options if something goes wrong, but, leave start-ups completely autonomous in order not to distort their nature."

MIROGLIO G., PRESIDENT OF MIROGLIO SPA, 2016

Accordingly, the partnership is in continuous evolution and managed, adapted and controlled by the committee (*Pioneer* step) that constantly monitors all activities. Miroglio, with an Equity Partnership, constructed this successful *Collaborative Asymmetric Partnership* with an investment for a specific project, in which both companies involved implemented constant co-creative behaviour thanks to the proactive alignment in all departments. As Mr Miroglio declared: "We're not interested in contractual collaborations because the Start-up must become a business innovation to be extended in all departments and existing businesses" that's why a structured agreement of co-creative work must be implemented.

Solutions to size-related problems, corporate culture rejuvenation, more dynamism, access to easy processes, quicker response to market signals, and access to innovation sources are only some of the advantages highlighted by Mr Miroglio as the driven reasons to build asymmetric partnerships.

"On the one hand start-ups can offer an out-of-the-box approach, without business history or regulations conditioning their conduct, that is, consequently, a more creative and innovative approach. On the other hand corporates can give access to important valuable assets that can create value added for the smaller partner."

MIROGLIO G., PRESIDENT OF MIROGLIO SPA, 2016

Even if *Miroglio Innovation Program* has a structured and well-organized management, with many successful past experiences of collaborations between asymmetric partners, some aspects are still considered challenging and have to be constantly monitored and enhanced. Regarding Internal barriers, Mr Miroglio highlighted the difficulty to have always a complete behavioural alignment among all departments; furthermore, the most challenging external barrier is considered the management of different timing. The very central problem concerns different speed: while start-ups have easy and fast processes due to the easiness of the business model and the initial phase of the business itself, larger

enterprises must cope with a much more complex organization with processes that are, necessarily, extremely structured.

> "Our aim is to obtain more flexible processes in all departments thanks to the collaboration with start-ups and to be able to face, in a more organized but, at the same time, adaptable way, all business life-phases."

MIROGLIO G., PRESIDENT OF MIROGLIO SPA, 2016

With Miroglio Innovation Program the company has gained experience in the field of collaboration with innovative SMEs, and through the whole interview Mr Miroglio underlined all reasons that could drive the decision to start such collaboration, and all the advantages that derive from it. Nonetheless, he considered also the possible disadvantages that can arise from a partnership between different partners, that usually are related to the rigidity of processes of the larger enterprise; however, the approach of both firms might cause a problem, accordingly: "Start-ups must learn to have a more business-oriented approach, not only finance-oriented view, in order not to obtain only a temporary output but to encourage the business growth and make it sustainable" (Miroglio, 2016).

4.3.3. Battistella Company

Battistella Company was founded in 1953 in Pieve di Soligo (Italy), and, nowadays, it is one of the most significant Italian organizations in the production of furniture systems. A strong tradition of craftsmanship, a highly specialized know-how and the development of new technologies are the values that characterize the company. At the centre of his philosophy is a future-oriented vision supported by modularity, flexibility and comprehensive application, clear expressions of a craft tradition that continues in technologically advanced and open-tofuture challenges.

Nova Lab is Novamobili⁶⁶ department for products' research and design. From to concept to the prototype, all phases are controlled and developed until the very final configuration to be implemented in new collections. It consists of a team of designers, engineers and technicians, in collaboration with leading names in architecture and design,

⁶⁶ Battistella Group includes three brands: Nidi, Novamobili, and cinquanta3.

offering innovative furnishing solutions⁶⁷. Mr Alberto Battistella⁶⁸ is the Marketing Manager of Battistella Company.

The Asymmetric Partnership analysed during the interview was between Novamobili, part of Battistella Company with a turnover $> \in 50$ million and 450 employees, and some designers, architects, and studios, for example *Zaven*, a multidisciplinary creative studio. All Battistella products derive from a single productive plant, namely *Baco*, that is an internal supplier of the company incorporated in a department, and all management of semi-finished products is built on synergies among materials and products. With complex organizational process the company characteristic modularity permits to produce large numbers but with a flexible just-in-time vision. The productive layout is too complex to be outsourced, however, accessory products to combine with the core business are one of the aspects that can help differentiating Novamobili Brand worldwide: "A lot of collaborations have been built in order to contaminate our products accessories with innovative solutions" (Battistella, 2017).

In the past, in order to find possible partners, Novamobili used platforms (it has sponsored an on-line contest in order to find new solution for door handles) and accelerators like *H-Farm* to start some short-term collaborations. For what concerns the current partnerships built with designers and architects studios, during the *Prepare* phase many clarifications were implemented before the very start of the collaboration; namely, both objectives were exhaustively explained, all risks were investigated, vision, mission, and strategy of both partners and in the collaboration were clarified, and a Business Plan was constructed.

"We are a structured enterprise, with an innovative-oriented approach. In order to manage all collaborations already existent and be able to sustain future sources of innovation, we need to clarify each aspect from the very beginning of the partnership; only with a structured organization you are also able to adapt to future changes being aware of reciprocal objectives and risks."

BATTISTELLA A., MARKETING MANAGER AT BATTISTELLA COMPANY, 2017

On the contrary, the *Partner* phase of effective selection, organizational options and resources allocation isn't punctually designed throughout all financial and organizational structures but only with legal structures of exclusivity and non-competition. However, the

⁶⁷ Source of information: www.battistella.it

⁶⁸ Mr. Battistella was interviewed on 2nd February 2017. (Camilla Sforza, Interviewer)

lack in most of financial and organizational structures, is balanced by the fact that all collaborators are actively involved in the organizational structure; as a result, people collaborating are physically introduced in the company and considered, for the period of the collaboration, as part of the marketing office and take continuously part in the coordination of the project and daily practicality. In order to do it so, inter-firm teams for innovation and development are created and periodically communicate and monitor the progress of the project (Pioneer step).

> "We always have a Project Manager who has enough autonomy to effectively manage and decide for the partnership. The monitoring is usually structured periodically, however, it is also in constant adaptation in order to have always a fluid flow of information and innovative ideas. The aim is to constantly get external inputs and necessities."

BATTISTELLA A., MARKETING MANAGER AT BATTISTELLA COMPANY, 2017

These successful Collaborative Asymmetric Partnerships were constructed by Novamobili as investments for specific projects in which both companies involved implemented constant co-creative behaviour thanks to the proactive alignment in all departments. Mr Battistella highlighted all advantages that Novamobili actually gained while collaborating with smaller partners in the field of innovation:

- Decrease risks:
- Rejuvenate corporate culture;
- Dynamism;
- Quicker response to market signals;
- Closer relation to costumer and clients;
- Internationalization:
- Awareness of future trends;
- Access to sources of innovation;
- Access to marketing sources.

For what concerns risks, all operative production costs that aren't part of the core business, can be decreased through the collaboration with a smaller partner that has the flexibility to adapt to changes and a faster response also in the design of a prototype. When there is the need to internationalise, collaborating with an innovative organization can help rejuvenate the corporate culture and image; moreover, when the partner, even if small, has already international reputation, it can permit more dynamism and a fresher approach to new markets.

"Novamobili aim is to become a worldwide recognised Brand and the partnerships with designers and architects studios give us the chance to obtain awareness of different cultures and markets. Collaborations like the one with Philippe Nigro, aren't only development openings, but also opportunities to gain from others experiences and be influenced by different perspectives."

BATTISTELLA A., MARKETING MANAGER AT BATTISTELLA COMPANY, 2017

Mr Battistella highlighted, considering all his past experiences, all aspects in which Battistella Company did actually have difficulties in the functioning of partnership with SMEs and start-ups, and three main aspects emerged: behavioural alignment in all departments, complexity of the collaboration, and different timing. The internal barriers underlined by Mr Battistella, that depended on the personal readiness of the company, derived from the necessity to verify, during the Prepare phase, all preparation aspects in order not to begin the collaboration without a complete proactive approach; differences in cultures and decision-making processes or organizational *modus operandi* might have reflected the lack of behavioural alignment among departments and, consequently, intensified the lack of behavioural alignment between two companies collaborating and created complexity-related managerial problems. The external barrier, already seen in the previous analysed partnerships, was the difference in timing between asymmetric partners.

4.3.4. Eclisse

Eclisse was founded in 1989 by Luigi De Faveri and today it is a leading brand in the production of counter frames for sliding doors and windows. It can produce 1300 frames a day and has more than 30 representative agencies, 2000 distributors in Italy and 9 subsidiaries worldwide. The entrepreneurial perspective has provided, over the years, a continuous research of advanced industrial systems and allowed the company to compete in a highly selective market. The expansion of the range of models combined with the ability to innovate products and processes, driven by a strong innovation-oriented philosophy have led to

progressive and encouraging development in the Italian market and abroad⁶⁹. Mr Luca Manzato⁷⁰ is the Sales Manager of the company.

The Asymmetric Partnership analysed during the interview was between Eclisse, engineering industry, with a turnover < € 50 million and about 200 employees, and a Spanish small enterprise specialised in electronic control systems. Eclisse isn't a large enterprise but it is a medium enterprise with international presence and a growing trend in sales; its size, market position, and resource portfolio define an asymmetric relation with smaller sources of innovation like small enterprises, micro enterprises, or start-ups. This partnership is one of the few experiences of co-creation with external partners, R&D department is traditionally centralized.

Inputs for new solutions often derive from representatives from the subsidiaries abroad or national distributors, who collect all customer requests and expectations. Thanks to the relationship with all people involved in the process of commercialization, built on years of reciprocal trust, Eclisse can count on a vast number of external sources to evaluate future trends with field tests. However, knowing the demand doesn't necessarily mean the implementation of a *Collaborative Asymmetric Partnership*.

> "Here in Veneto area we are living a generational transfer for what concerns the entrepreneurs. The inclination to risk more is not proportional to the age of the owner but it is strictly related to the trend the company had before and after the crisis."

MANZATO L., SALES MANAGER AT ECLISSE, 2016

Accordingly, if a strategy has worked until now, and has sustained the company through the crisis, there should be no reason to change it. "The problem is that what worked yesterday won't necessarily work tomorrow" (Manzato, 2016). For this reason, in the last few years, the organization has started some asymmetric collaborations.

In order to find the possible partners, Eclisse didn't use platforms, accelerators or incubators but, after a market analysis, used a direct contact through an external consultant. In the *Prepare* phase both objectives were exhaustively explained in order to have a mutual target. The Partner phase of effective selection, organizational options and resources allocation was structured throughout: legal structures such as non-competition and exclusivity

⁶⁹ Source of information: www.eclisse.it

⁷⁰ Mr. Manzato was interviewed the 29th December 2016. (Camilla Sforza, Interviewer)

clauses; organizational structures with the creation of inter-organizational development and innovation teams, the definition of all people involved in the project, and the definition of decision-making representatives for both companies.

The collaboration was built on the necessity to implement an electronic accessory into some sliding doors systems; Eclisse works in the engineering industry and needed a partner in the electronics. In order to make the collaboration work, both companies participated actively in the design of the project and co-created the effective output. Even if several structured tools were implemented, the nature of the partnership needed structural rearrangements in the field of organization, in order to adapt to changes and follow the evolution of the performances (*Pioneer* step). Consequently, a constant monitoring was implemented through formal periodical updates, and daily informal communication with e-mails and videoconferences.

This successful *Collaborative Asymmetric Partnership* was constructed by Eclisse as an investment for a specific electronic project in which both companies involved implemented constant co-creative behaviour. Quicker response to market signals, access to innovation sources, and access to new technologies are the advantages a large enterprise could gain when collaborating with SMEs or start-ups (Manzato, 2016).

"Establishing an asymmetric partnership, between us and a smaller organization in order to implement new innovative solutions, not only for what concerns accessories, but also evolving our core business, is a fundamental strategy to face market changes. We have learned how the environment can change, we must learn how to constantly adapt going out of the business know-how."

MANZATO L., SALES MANAGER AT ECLISSE, 2016

Mr Manzato also highlighted the aspects in which they did actually encounter some difficulties in the functioning of the partnership. Behavioural alignment in all departments, knowledge share and technology share appeared to be the most challenging aspects.

In the case of Eclisse, business dynamics among departments, are the most relevant internal barriers to overcome. It is a medium-sized company, very centralised for everything concerns decision-making process; for this reason, all collaborations of co-creation with external partners must move over the entire organization and almost always wait for the final consent. The process of finding new innovative partners, evaluate them and eventually start a collaboration appears to be more intricate without a project manager or a committee designed for this exact purpose.

4.4. COMPARISON BETWEEN SMES AND MEDIUM-LARGE ENTERPRISES

In this paragraph there will be a complete comparison among the data observed from the start-up survey, SMEs interviews and medium-large enterprises. It will be structured following the three phases of the Collaborative Asymmetric Partnerships explained in the previous Chapter and after that through the analysis of both advantages and challenges experienced within the interviews.

As Mr Cavedon stated: innovative start-ups and SMEs are a heritage for the future, not only a capital to invest but also an opportunity to support, if appropriately developed, the whole economy, including large enterprises. Accordingly, in order to become an effective instrument for development, start-ups must become more trusted as a source of innovation even if consistently talking about start-ups has led to a sense of underestimation of professionalism and reliability (Filocamo, 2017). Their approach has to be more businessoriented, as Mr Miroglio suggested, and less idealistic in order to avoid "initial scepticism" (Volpe, 2017).

4.4.1. **Prepare**

The *Prepare Phase* consists of all univocal aspects that must be verified before even considering building a partnership, in particular for what concerns readiness, objectives, and selection tools of the collaboration. Both SMEs or start-ups and medium-large enterprises involved in the study agree that, in order to start building a Collaborative Asymmetric Partnership (CAP) there must be readiness. In other words: the managerial predisposition to innovative ideas. Talking about start-ups, whose core business might be technological innovation, it is easy to imagine a predisposition to it; instead, it is harder to trace an innovative approach in larger enterprises. Moreover, even though a company has a strong managerial innovative-oriented approach, it could not be enough to start collaborating, for instance if the owner of an enterprise wants to collaborate with an asymmetric partner to gain sources of innovation but doesn't have the full support of the entire company. As a result, both types of partners interviewed consider fundamental not only innovativeness, but also commitment and proactive attitude; there must be a complete behavioural alignment in all departments and trust across all levels, as Babylon Cloud highlighted during his interview.

For what concerns readiness and awareness of all partner selection tools, the survey and the interviews investigated also the presence of platforms, incubators, accelerators, etc. Both accelerators interviewed have international reputation and a widespread presence; however, a part from Miroglio Group and its multi-year experience with accelerators and financial institutions, almost all the parties involved in the analysis have never been in contact with such organizations. The feeling on this matter is that: although all these strategies for development or arenas where to find innovative ideas are quite known, also in Italy, they seem to represent a sort of niche, not only due to meritocracy but quite related to the territory in which a SME or large enterprise is located (Battistella, for example, worked with *H-Farm* once). Accordingly, some of the SMEs surveyed considered the acceleration programs as something related only to a élite of firms that aren't necessarily the most innovative or prepared but "know the right people" 71.

Even though the use of platforms and other tools wasn't so common among the firms interviewed and surveyed, all of them had a clear idea of which are the parameters of selection of a possible partner. In particular, all large enterprises stressed three bullet points: innovativeness, reliability and readiness in terms of business-oriented vision, not only financial (Miroglio, 2016), compared to SMEs, whose selection criteria are: complementary competences, available resources, compatible objectives, cooperative attitude, and reliability. Available resources and complementary competences are fundamental in order to find a company that has a business in line with the innovative solution a small enterprise wants to offer; but compatible objectives are something different, which refers to an aspect related to sharing and coexistence of two entities that must be driven by a cooperative attitude that can be applied only if both companies are reliable. Reliability is the only aspect shared by both SMEs and large enterprises as essential to work together. Mamma M'ama, Miroglio Group, Babylon Cloud, Battistella Company, and Eclisse highlighted the importance of complete trust as the only way to build a successful CAP.

The next table displays a summary of all aspects clarified from the beginning between partners, even before the very start of the collaboration.

⁷¹ Some of the SMEs interviewed agreed to complete the questionnaire and to use their names in a list of SMEs involved in the survey, but didn't agree to report their specific answers. That's the reason why, sometimes, there is no reference to some quotes.

TABLE 10 – PRE-COLLABORATION ASPECTS CLARIFIED

CATEGORY	START-UP SURVEYED	START-UP INTERVIEWED	ELECTROLUX	MIROGLIO	BATTISTELLA	ECLISSE
Objectives	61%	MammaM'ama + BabylonCloud + AMC	X	X	X	X
Risks	9%	AMC	X	X	X	
Vision,Mission, Strategy	38%	MammaM'ama + BabylonCloud + AtBoat	X	X	X	
Business Plan	7%		X		X	

Source: Author.

Clarification of reciprocal objectives seems to be the most important thing to underline for the majority of SMEs surveyed and interviewed and all the medium-large enterprises. Clarify objectives to the partners, on the one hand means to explain personal expectations from the CAP, on the other hand it is a proof to verify that both objectives can coexist and a way to find a mutual practicable orientation. However, only 61% of the start-ups actually talked with the partner about reciprocal goals; furthermore, the firms included in the 39% which didn't clarify them, are all part of the percentage which didn't even discuss about risks or vision, mission and strategy with the partner.

At the bottom of the SMEs survey completed on-line, one of the questions I asked was: "Is the Asymmetric Partnership experienced considered positive or negative? Why?" This was one of the most interesting parts of the questionnaire because the vast majority of SMEs surveyed thought, even if CAP could be an excellent development and innovation instrument, in their experience the managing of the collaboration became too complex and the difficulties in the understanding of reciprocal needs created even more challenges regarding the balance between different timing. In my opinion these difficulties could be generated from the unbalance among processes and the difficulties in communication but it's impossible to deny that the absence of all pre-collaboration clarifications is an aggravating factor. How can you expect that two partners understand each other needs if they didn't clearly identified reciprocal expectations, strategies and business plans?

Large enterprises normally need a rigid planning procedure in order to converge all interest and manage the collaboration. In the case of Miroglio important aspects were all clarified vastly but the partnership reveals a lack of business plan. All other cases analysed were of companies that are used to collaborating with smaller partners but don't have an internal innovation program in which a committee is defined for every single project of collaboration. A project manager, in Miroglio, is always appointed and is completely focussed on the coordination and adaptation of the relationship.

Eclisse is the only example in which the clarification hasn't been done *in toto* and the collaboration is successful. However, it's also the only case in which size differences aren't extremely pronounced and the relationship between the partners is of constant, daily, information sharing, enriched by a strong presence of informal communication. The continuous monitoring and adaptation is due to the fact that people involved in the collaboration are co-creating the final product and have necessarily the same objective in terms of output. Either way, the empirical study gives evidence to the necessity of building, in the *Prepare Phase*, all bases to develop gradually a coordinated partnership.

Vision, Mission and Strategy are all aspects that the vast majority of the people interviewed and surveyed considered as fundamental to be defined in order to have clear reciprocal expectations. In addition, it is important to highlight the propension of all established companies that are considerably structured, to define all aspects with the smaller collaborator. Electrolux Professional and Novamobili declared that objectives, risks, vision, mission, strategy and business plan were all investigated before starting the collaboration and with the presence of the smaller partner; Miroglio Group did it with a specific support of the *Miroglio Innovation Program* and an appointed inter-firm team.

4.4.2. Partner

The *Partner Phase* consists of the effective selection of a collaborator and the consequent decisions regarding organizational options, resources allocation and formal structures implemented in the CAP. Nearly the 50% of the SMEs surveyed and interviewed, and Electrolux Professional, Battistella Company and Eclisse decided to build a contractual relationship. This is the most used type of collaboration because it permits coordination of all aspects but without a binding long-term commitment. Accordingly, when talking about "Collaborative" asymmetric partnerships we are not defining mere supply contracts or informal collaborations but co-creative and demanding relationships. Miroglio Group, Mamma M'ama, and the 14% of SMEs surveyed experienced an Equity Partnership because the relation was more future-oriented with long-term expectations, as table 11 shows.

TABLE 11 - COLLABORATION TYPES

CATEGORY	START-UP SURVEYED	START-UP INTERVIEWED	ELECTROLUX	MIROGLIO	BATTISTELLA	ECLISSE
Informal collaboration	7%					
Supply Contract	14%					
Contractual relation	45%	All others	X		X	X
Equity partnership	22%	MammaM'ama		X		
Partial / Total M&A	7%					

Source: Author.

Regarding number and nature of resources allocated to define the type of collaboration, table 12 displays an almost completely homogeneous trend. In particular, all medium-large enterprises and SMEs experienced a partnership built on an already existing innovative idea financed in order to be adapted to specific project requirements. The project, in these cases, is to implement the innovation in the larger partner business, with attention of the variations it requires. Investments for punctual projects implemented through contractual relations are the starting point of every CAP. Most of the times these are the organizational options widely used to test the success of a partnership at a certain level. It is true that, in order to build a solid collaboration through time, it is necessary to start to have a futureoriented approach from the beginning; however, mostly when image-related and financial risks are high, a contractual structure is enough safe but also not too much binding. Equity partnerships, like the examples of Miroglio or Mamma M'ama, are constructed when there is already reciprocal funded trust.

TABLE 12 – RESOURCES INVOLVED

CATEGORY	START-UP SURVEYED	START-UP INTERVIEWED	EL.	MI.	BA.	EC.
Existent Innovation + few resources	22%					
Project Investment + resources + managerial attention	64%	100%	X	X	X	X
Capital Investment + synergies + managerial att. + control	7%					
Co-creation + synergies + full control	7%					

Source: Author.

Partner Phase, finally, includes all formal structures for the creation of the partnership: financial, legal, and organizational.

Table 13 – Structures Implemented

CATEGORY	START-UP SURVEYED	START-UP INTERVIEWED	EL.	MI.	BA.	EC.
Financial models of costs	14,3%		X			
Financial models of profits	14,3%		X			
Financial models of revenues	21,4%					
Financial models on property rights	7,1%					
Legal structures: exclusivity	35,7%	MammaM'ama + BabylonCloud		X	X	X
Legal structures: non-competition clause	28,6%		X		X	X
Legal structures: exit fee	7,1%					
Organizational structures: inter- organizational teams	50%	MammaM'ama + BabylonCloud	X		X	X
Organizational structures: definition of decision makers	35,7%	BabylonCloud		EXECUTIVE		X
Organizational structures: definition of people involved in the collaboration	42,9%	MammaM'ama	X	COMMITTEE	X	X
Totally joined organizational structure	21,4%		X			
None	21,4%					

Source: Author.

As the table shows, organizational structures are the most implemented not only from SMEs and start-ups, but also from the bigger interviewed together with some legal options like exclusivity and non-competition clauses. For what concerns organizational features, the definition of the people involved in the collaboration seems to be extremely important, immediately after the creation of inter-organizational teams. These teams are the best way to have a reciprocal awareness of changes and needs and permit to have a continuous information sharing. When there is a lack of communication also other problems can evolve and the asymmetry of partners might be reflected in the unbalance of development flows.

In the case of Miroglio, the executive committee inside Miroglio Innovation Program has the aim to build and coordinate the entire collaboration; the committee is composed, also, by some representatives of the smaller partner. It is an excellent example of collaborative definition of the organizational structure. Furthermore, Miroglio, and Electrolux usually erect a completely joined organizational structure; with Battistella, the three companies appoint also a Project Manager in order to have a specific person who represents the company and has enough authority to decide. It is extremely important to define such representative in order to

avoid confusion in the communication between partners; it is a problem highlighted by Mr Filocamo who, working in FTA⁷², has multi-year experience in the field of CAP.

Financial models are usually the less used in this types of collaboration; however, if the companies involved already shared objectives, risks and business plans the information to face the collaboration is already enough. It is very interesting to highlight that the majority of the people interviewed did actually have positive experiences but, some of them didn't; these firms that already had problems in the clarification of objectives, risks, vision, mission, strategy and business plan in the prepare phase, also have difficulties in the implementation of the legal, organizational, and financial structures in the *Partner Phase*.

4.4.3. Pioneer

The Pioneer Phase could be seen as the easier step for the collaboration, on the contrary, it is a crucial moment in which the relationship can actually last in time or not. This phase includes all monitoring and adapting aspects of the Collaborative Asymmetric Partnership. At the question "How is monitoring done?" the answers were various: daily chatting, reports, final evaluation, periodical meeting, feedback once a week, step-by-step development monitoring, etc.

We can observe that all established companies interviewed and all SMEs that are in a Collaborative AP with structured enterprises don't randomly manage the collaboration. On the contrary, they actively monitor the development of the collaboration throughout an organized system. For Electrolux, Miroglio, Battistella, Eclisse, Mamma M'ama, and Babylon Cloud feedbacks and adaptations are constant; in order to be aware of daily progressions, many monitoring features are implemented: periodical meetings (face to face or videoconferences if the partner isn't Italian); constant formal communication, weekly updates and, most of the times, also informal communication with aperitifs, dinners and informal events. The monitoring of the CAP is obviously easier if there is an inter-firm team for the project. In the case of Miroglio committee and Battistella, those teams are physically incorporated in the company during the whole collaboration.

⁷²Fashion Technology Accelerator.

The constant monitoring is fundamental in order to have the chance to adapt. This doesn't mean that all firms actively monitoring are also able to actively adapt, but there is a lower percentage of problems in adaptation from the people interviewed or surveyed that had experienced a strong monitoring during the whole CAP.

Accordingly, SMEs recording only the presence of final evaluation or periodical meetings every 3-4 months are the same that had a stronger possibility to experience a negative partnership. The step-by-step development monitoring doesn't have to be seen as an excessive degree of control but an opportunity to always externalize problems, difficulties and conflicts in order to have the possibility to adapt by finding new solutions.

4.4.4. Advantages

It is easy to understand that start-ups and medium-large enterprises or multinationals must gain differently from a *Collaborative Asymmetric Partnership* because the objectives of it are extremely different even if complementary.

Innovative start-ups surveyed and interviewed agree that partnerships with established companies can generate many benefits. The most recognised are: access to new skills, access to brand and power reputation and access to managerial expertise (as table 14 shows). Decrease of risks is highlighted because it is considered an advantage for both start-ups (at a lower percentage) and larger enterprises; however it is recognised on two different levels. Regarding start-ups the risk is related to the standalone situation in which all investments must be centralised in an innovation that won't necessary be disruptive and successful when commercialised. On the other hand, larger enterprises risk reduces thanks to CAP when fixed costs do not increase and a simple monetary investment and co-creative approach can evolve in a new innovative solution.

While a quicker answer to market changes seems to be jointly recognised as an important advantage of CAP for all medium-large companies interviewed, access to sources of innovation appears as a fundamental benefit for both start-ups and larger enterprises. As the table displays, then, innovativeness is not only one of the most important reasons to build this collaborations, but also an experienced effective advantage. Consequently, also the possibility to have access to new Networks has been proven as another positive aspect.

TABLE 14 - ADVANTAGES

CATEGORY	START-UP SURVEYED	START-UP INTERVIEWED	EL.	MI.	BA.	EC.
Access to financial resources	14,3%	MammaM'ama + BabylonCloud + PowerSINT				
Solution to critical size	21,4%	MammaM'ama + BabylonCloud				
Decrease of risks	14,3%	BabylonCloud	X	X	X	
Access to deep-rooted processes	35,7%					
Access to Marketing expertise	42,9%				X	
Access to Sales expertise	28,6%					
Access to Managerial expertise	35,7%	PowerSINT				
Access to Regulatory expertise	21,4%					
Brand power &Reputation	35,7%	At Boat + PowerSINT				
Networking	57,1%	BabylonCloud		X	X	
Dynamism	0			X	X	
Access to sources of Innovation	35,7%	BabylonCloud	X	X	X	X
Access to lean processes	7,1%		X	X		
Rejuvenate corporate culture	7,1%			X	X	
Access to new skills	42,9%	AMC				
Access to new technologies	28,6%					X
Awareness of future trends	21,4%				X	
Closer to clients and customers	35,7%		X		X	
Access to potentially disruptive outcomes	21,4%					
Quicker answer to market changes	7,1%		X	X	X	X
Access to niche competences	28,6%					

Source: Author.

4.4.5. Barriers to Collaborative Asymmetric Partnerships

One of the most interesting aspects examined during the entire empirical research is related to all the challenges that both actors in the partnership must face during the whole process of collaborating in the three phases: prepare, partner, and pioneer.

The challenges underlined by the people involved in the research can be divided into Internal and External barriers to Collaborative Asymmetric Partnerships. Internal barriers, listed in table 15, depend on the personal readiness of the company to start a partnership; accordingly, these barriers are usually related to problems that can develop throughout the *Prepare Phase*. External barriers, instead, refer to challenges strictly related to the balance between partners for everything that may concerns structural and behavioural differences and the resources share. These barriers, consequently, are a projection of problems that can surge during the *Partner Phase* about decisions regarding organizational options, resource allocation, and shared structures. This phase concerns, thus, the coexistence of two asymmetric organizations despite their differences. As we have already seen, adaptability and monitoring are the aspects that characterise the *Pioneer Phase*, the first depends on internal predisposition, the second on "external" capacity to implement a structured ensemble of instrument to effectively monitor and then adapt as a consequence. However, personal capability to adapt to changes is difficult to evaluate. Accordingly, in the survey and interviews, the participants were asked to evaluate problems in adaptability concerning the partner behaviour; for this reason it is considered an external barrier instead of an internal.

With possible failure awareness increasing complexity of the collaboration seems to be one of the most challenging aspects regarding internal barriers for start-ups. Readiness to collaborate with an asymmetric partner isn't easy to achieve for a small organization; the complexity deriving from all processes and formal structures can be challenging to sustain, even more if there is no preparation first. The understanding of objectives, strategies, and risks involved (constructed in the Partner phase) can help achieve reciprocal awareness of the resources involved and commitment of both partners, in order to have fewer "negative surprises" while cooperating, and manage the collaboration with more credibility and efficiency.

As table 15 displays, the most shared internal barrier for start-ups surveyed, interviewed, and medium-large enterprises together, is in the field of behavioural alignment⁷³. The types of firms involved in this collaboration have evident huge differences that can influence the perception in terms of reliability of the partner. As we have already underlined, the continuous talking about start-ups regarding innovation had, sometimes, an opposite effect on larger partners; moreover, vulnerable start-ups have a constant suspicion of opportunistic behaviour by established firms (Cavedon, 2016; Filocamo, 2017) as the survey displays. All

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⁷³ It is important to notice that AtBoat perception is from a start-up point of view; instead, Alessandro De Losa (CEO of Babylon Cloud), in this field, is reporting his experiences with multinationals. He highlighted, during the interview, the complexity to have an univocal behaviour while dealing with innovative solutions outsourced.

these negative stereotypes are difficult to fight in organizations composed by different people; the aim, while preparing the collaboration, must involve the creation of a solid team that has a single aligned behaviour of proactivity regarding the whole collaboration with an asymmetric partner, as Mr De Losa of Babylon Cloud, Mr Lazzarotto of Electrolux, and Mr Manzato of Eclisse, strongly highlighted.

TABLE 15 – INTERNAL BARRIERS

CATEGORY	START-UP SURVEYED	START-UP INTERVIEWED	EL.	MI.	BA.	EC.
Possible risks analysis	31%					
Possible failure awareness	54,7%					
Behavioural alignment in all departments	42,8%	BabylonCloud + AtBoat	X	X	X	X
Internal communication						
Rigid and complex decision making process			X			
Increasing Complexity of the collaboration	62%					
Lack of entrepreneurial culture						
Risk aversion						
Complex processes						
Internal Flexibility	35,7%					

Source: Author.

Table 16 shows external barriers regarding Collaborative Asymmetric Partnerships. According to start-ups, opportunistic behaviour results as one of the most challenging aspects to deal with. The unbalance between the degree of control and the difference in bargaining power were manifested in various examples examined in the survey; accordingly, knowledge share and technology sharing still remain some of the most critical aspects of the collaboration. In order to face these obstacles, formal structures must be implemented specifically in terms of legal clauses. However, it is important to underline that, most of the times, small companies don't have the normative experience to understand and be actively involved in the decisions regarding, for example, non-competition or exclusivity. This particular point, sometimes, negatively affects the success of the relationship perceived by the start-up.

Reciprocal commitment and adaptability are, then, problems commonly experienced (notice that Electrolux point of view is from Mr Lazzarotto who, as a consultant, is examining those aspects from an external perspective, consequently, he refers to problems related to lack in large multinationals behaviours). Both these barriers must be set up in the preparation phase and then implemented in the partner phase and sustained in the pioneer. Adaptability to changes, in the case of larger enterprises, obviously depends on the complex structure of the organization and is strictly related to the flexibility, whose absence is highlighted in the table by start-ups. Innovative start-ups' grate advantage is in flexibility and reactiveness to changes, that's why in the Collaborative asymmetric partnership it is a critical aspect; the collaboration needs constant co-creative attitude and balance in expectations and practicality. Different timing appears to be the direct and shared consequence of all challenges just examined.

Table 16 – External Barriers

CATEGORY	START-UP SURVEYED	START-UP INTERVIEWED	EL.	MI.	BA.	EC.
Communication	42,8%					
Joint design of the collaboration	50%		X			
Understanding of reciprocal needs	33,3%		X			
Knowledge share	54,7%					X
Technologies share	57%					X
Different Timing	85%	BabylonCloud + PowerSINT + AMC	X	X	X	X
Partner Flexibility	71%					
Professional Arrogance	47,6%					
Balance of degree of Control	38%					
Adaptability	47,6%	AtBoat	X			
Reliability	45%					
Reciprocal commitment	57%	PowerSINT	X			
Opportunistic behaviour	69%	AtBoat				

Source: Author.

The very central problem concerns different speed: while start-ups have easy and fast processes due to the easiness of the business model and the initial phase of the business itself, larger enterprises must cope with a much more complex organization with processes that are, necessarily, extremely structured. In addition, the partnerships studied in this thesis are collaborative and related to a complementary work of both partners, so they are even harder to manage.

4.4.6. Unsuccessful Collaborative Asymmetric Partnerships

Thanks to the surveyed firms and the people interviewed, it was possible to understand why such Collaborative Asymmetric Partnerships may not succeed as expected.

Even though a company has a strong managerial innovative-oriented approach, it could not be enough to start collaborating; Eclisse highlighted the continuous barriers to an efficient collaboration deriving from the behavioural misalignment among all departments of the company (Manzato, 2016). As a result, both types of partners interviewed consider as fundamental not only innovativeness, but also commitment and proactive attitude; there must be trust across all levels, as Babylon Cloud highlighted it during his interview (De Losa, 2017).

Reliability is the only aspect shared by both SMEs and large enterprises as essential to work together. Accordingly, in order to build a successful collaboration, and build reciprocal trust, it's extremely important to prepare a common design of the collaboration throughout the clarification of objectives, risks, vision, mission, strategy, and a business plan. However, only the 61% of the start-up did actually clarify them; furthermore, the firms part on the 39% had problems in the fields of opportunistic behaviour, understanding of reciprocal needs and reciprocal commitment. These same firms, also declared that the managing of the collaboration became too complex and the difficulties in communication created even more challenges regarding the balance between different timing.

These difficulties could have been generated by the unbalance among processes and the difficulties in interaction but it's impossible to deny that the absence of all precollaboration clarifications was an aggravating factor. When there is a lack of communication also other problems can arise and the asymmetry of partners might be reflected in the unbalance of development flows; in a co-creative or development shared project it is fundamental to balance behaviours.

These firms that already had problems in the clarification of objectives, risks, vision, mission, strategy and business plan in the prepare phase, had also difficulties in the implementation of the legal, organizational, and financial structures in the partner phase and the vast majority of them experienced a negative collaboration due to problems regarding technology and information share. Accordingly, SMEs recording only the presence of final evaluation or too isolated periodical meetings are the same who had a stronger possibility to experience a negative partnership.

4.5. CONCLUDING REMARKS

The reason why many studies have devoted considerable attention to SMEs, involves the percentage of enterprise population, which consists almost entirely of small and medium-sized enterprises in all EU Member States and a huge part of the economic actors in other developed countries, more than 99.9% in Italy (European Commission, 2015).

Therefore, SMEs occupy a central position in the economic growth and recovery from the financial crisis, and cover a huge portion of added value for all member states, even though their economic contribution among them varies markedly. The impact of SMEs in worldwide economic growth and, consequently, employment rate, constitutes the main reason for their study that is developed looking at their transformation through time due to the necessity to stabilize during the crisis. In his work, *Innovation and Industry Evolution*, Audretsch (1993) suggests that small firms, at least in some situations, are agents of change through innovative activity. Innovation, thus, is a current concept while speaking about small and medium-sized enterprises (Schumpeter, 1934); their dynamic role in the economic environment and predisposition to change is due to the organizational flexibility and innovating capability (Duarte, 2004).

What the economic and financial crisis has underlined in the last few years, is the continuous presence of uncertainties in the economic environment, and the need to cope with them. *Collaborative Asymmetric Partnerships* attempt to be the solution.

"A partnership may be called asymmetric when it involves co-operation between two companies with marked differences in terms of resource portfolio and market position."

BARABEL, M., MEIER, O., & SOPARNOT, R., 2016

The specification "Collaborative" is chosen in order to separate merely outsourcing partnerships from co-creative ones, based on a strict collaboration and contribution of resources. In the field of asymmetries, what becomes crucial is a new perspective for changing the rules of competition by integrating new actors, even if these actors are not similar to each other. The issues associated to the relationship between SMEs and large companies, within the framework of strategic alliances, haven't been studied deeply so far. Small and medium-sized enterprises and start-ups represent the actors who are driving major innovation and disrupt entire industries; their capabilities are mostly, but not exclusively, noticeable in high tech sectors.

The empirical study based on survey and interviews gives evidence to the reasons driving the collaboration and highlights the advantages that create the effective recovery strategy to face globalization, market changes and financial crisis throughout innovativeness.

The complementarity of the objectives of both SMEs and large enterprises are evident from the first questions submitted: in particular, all large enterprises stressed three bullet points: innovativeness, reliability and readiness in terms of business-oriented vision, not only financial (Miroglio, 2016). SMEs selection criteria are: complementary competences, available resources, compatible objectives, cooperative attitude, and reliability. The speed of technological development and the presence of numerous different new technologies push firms, which might want to commit to more than one technology at a time and learn from others and maybe, subsequently, integrate (Barabel, Meier, & Soparnot, 2014). It is a consequence of the increased competition that spreads not only from well-known industries, but also from new, improbable, actors like SMEs who may have a different approach to how the economic environment is changing, likewise the customer demand.

As a result, an alliance is not exclusively a matter of increased efficiency but a gain in terms of possibilities to facilitate positioning change or amplify frontiers, spreading risks and costs, for example, related to innovation, in order to increase market power and new complementary skills that are mutually beneficial. Access to sources of innovation is a fundamental benefit for both start-ups and larger enterprises; as the experiences of the interviewed display, then, innovativeness is not only one of the most important reasons to build this collaborations, but also an experienced effective advantage. Consequently, also the possibility to have access to new Networks has been proven as another positive aspect.

The role of SMEs in employment has been considered marginal until proven otherwise by "The job generation process" by Birch (1979); before that, large firms were historically considered as the major, and sometimes the only, significant driving force for the growth of employment in the modern era. In the following decades, Birch's findings were confirmed by the worldwide research on the relation between firm size and job creation (Stangler, 2009; Haltiwanger, Jarmin, & Miranda, 2013; Neumark, Wall, & Zhang, 2011) and gave rise to a debate on the role of SMEs and entrepreneurship in employment rate (Ayyagari et al., 2011; De Kok et.al, 2013; Bravo-Biosca, 2010; Fort et al., 2013; Romero, 2011; Stuky, 2013). Small and medium-sized enterprises represent a wide business base in every European country, which play a significant role in the economic development (Bacon & Hoque, 2005). They are considered the backbone of the European economy due to their ability to produce sustainable development through innovation (Terziovski, 2010; Konsti-Laakso *et al.*, 2012; Foreman- Peck, 2013), society support, workplaces, and wealth for the land they are placed in. Barrow (1993) found that small firms developed over 60% of all innovations in the 20th century. We also have to point out that today's organisations face an additional challenge, which is the urge to innovate, not just occasionally, but often, quickly, and with a solid success rate (Lawson and Samson, 2001). To enable the best possible value creation, innovations are often realized in competitive networks that combine knowledge and assets from the partners (Jørgensen & Ulhøi, 2010).

Thus, the ability of organizations to aggregate – participating, for instance, in value innovative networks or through *Collaborative Asymmetric Partnerships*– has been identified as a necessary requisite for business innovation not only in fast-cycle markets.

Major directions given in the third chapter appeared to be fundamental in order to obtain a success in the partnership. The vast majority of the experiences analysed shows a negative trend mostly when the steps of the three phases, *Prepare*, *Partner* and *Pioneer*, aren't followed. Both SMEs or start-ups and medium-large enterprises involved in the study agree that, in order to start building a Collaborative Asymmetric Partnership, there must be readiness, in the preparation phase that, consequently, reflects its deficiencies in the following steps.

As the analysis shows, organizational structures together with some legal options like exclusivity and non-competition clauses are the most implemented not only by SMEs and start-ups, but also by the bigger firms interviewed. Inter-firm teams are the best way to have a reciprocal awareness of changes and needs and permit to have a continuous information sharing and decrease the possibilities to face drawback with external barriers. When there is a lack of communication also other problems can evolve and the asymmetry of partners might be reflected in the unbalance of development flows. The firms that already had problems in the clarification of the prepare phase, have also difficulties in the implementation of the legal, organizational, and financial structures in the partner phase and the vast majority of them experienced a negative collaboration due to the problems regarding also adaptation and monitoring.

The empirical research confirms advantages and challenges of *Collaborative Asymmetric Partnerships* and highlights a direct correlation among internal barriers and deficiencies in the preparation phase, external barriers and lacks in the partner phase, and adaptation as a consequence of previous deficits in other phases.

Accordingly, there are some guidelines that, if followed, might help in the creation of a successful collaboration between asymmetric partners, given the difficulties highlighted from the empirical evidence. These guidelines are structured throughout the support of Bannerjee, Bielli, & Haley paper: Scaling together: overcoming barriers in corporate-startup collaboration (2016).

- Improve your image by presenting a business case and growth model, be ready with "numbers" do not only think about what others can do for you but also on how you can collaborate in a success.
- Build trust and expect to develop a long-term relationship, as a consequence, expect a long pre-deal agreement complete of vision, mission and strategy; be always honest on your stage of development, constantly clear during the whole collaboration, not only in the preparation phase, accordingly, be realistic about timing.
- Carefully consider reciprocal objectives and risks before embarking on any relationship.
- Estimate and clarify broadly all purposes to ensure commitment of both.
- Promote and explain open innovation initiatives internally while looking at external tools for innovativeness like accelerators, incubators, and platforms; the access to start-ups, for what concerns large enterprises, must be clear and composed by only one person or a small team.
- Ensure that the whole organization is behaviourally aligned in the proactiveness for what concerns collaboration between asymmetric partners; if not, educate colleagues about the benefits of innovation and risk associated with this form of partnership.
- Clarify, internally, which are the people involved in the collaboration, construct new specific teams of R&D and define a project manager with enough autonomy to take decisions and constant awareness of collaboration development; hire enthusiastic and proactive inter-firm team members.
- Be always clear on the development stage during the whole collaboration, explaining step-by-step processes and setting well-defined expectations.
- Constantly monitor the partnership in order to have the chance to understand where the bottlenecks exactly are, and subsequently adapt; sometimes, differences in timing deriving from opposite processes might become too

- insurmountable: consider a parallel "fast track" with simplified process only to deal with dynamic SMEs.
- Aim to mutual understanding and seek cultural convergence in order to faster comprehend each other necessities and collaborate harmoniously in a reciprocal motivated environment.
- Implement all possible formal tutelary instruments: not only organizational but also legal and financial.
- Involve digital instruments in order to accelerate knowledge sharing.
- Reward collaborative attitude and promote cross-functional and crossorganizational teams at every level of the organization; develop key performance indicators with targets that must be plausible and mostly longterm oriented.
- Build a prior "plan B" in case of failure but always try to adapt to changes proactively.

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ANNEXES

Annex I. REFERRED LITERATURE

Schumacher	1973
of SMEs in the Economic Development	
Schumpeter	1934
Penrose	1959
Cressy & Olofsson	1997
ntage of SMEs in the economic environment	
World Economic Forum	2015
European Union	2015
of of Changes on CMTs	
ct of Changes on SMEs Schumpeter	1942
Schumpeter	1742
rtainty effects on SMEs	
Taylor & Bradley	1994
Gowan	2009
Cattaneo et al.	2010
Chow & Dunkelburg	2011
Sahin et al.	2011
Paul & Boden	2011
Martin	2011
Harvey	2011
Price, Rae, & Cini	2013
s constraints and access to Finance	
Berger & Udell	1998
Galindo & Schiantarelli	2003
Erixon	2009
OECD	2009
Ayyagari, Demirguc-Kunt, & Maksimovic	2011
s' features	
Thurik	1994
Biggs	2002
Welch, Benito, & Petersen	2002
Sullivan-Taylor & Branicki	2007
Taleb	2011
Yang	2012
Stokes	2012
Dahlberg & Guay	2012

Role	of Entrepreneurship	
	Johnson & Cathcart	1979
	Miller	1983
	Acs & Audretsch	1988
	Jack & Anderson	2002
	Duarte	2004
	Yang	2012
Innov	vation role related to entrepreneurship and SMEs	
	Schumpeter	1934
	Acs & Audretsch	1988
	Audretsch	1993
	Hadjimanolis	2003
	Tidd & Bessant	2009
	Cordeiro & Vieira	2012
	Barabel, Meier, & Soparnot	2016
Scept	ical Views on the effective role of SMEs in the economic development	
	Pack & Westphal	1986
	Little <i>et al</i> .	1987
	Pagano & Schivardi	2001
	Beck, Demirguç-Kunt, & Levine	2005
Datal	pase formation	
	Biggs	2002
	Ayyagari, Beck, & Demirguç-Kunt	2002
	Beck, Demirguç-Kunt, & Levine	2005
Job C	Creation by SMEs	
	Biggs & Shah	1988
	Ayyagari, Demirguc-Kunt, & Maksimovic	2011
	Kok, Deijl, & Essen	2013
	Cucculelli, Bettinelli, & Renoldi	2014
	European Union	2015
Inter-	-firm Collaborations	
	Von Hippel	1987
	Jorde & Treece	1990
	Carayannis & Alexander	1999
	Benavides-Velasco	2004
Asym	metric Partnerships	
	Minshall et al.	2010
	Chtourou & Laviolette	2015

Note: the table refers only to the literature taken into consideration in this Literature Review paragraph.

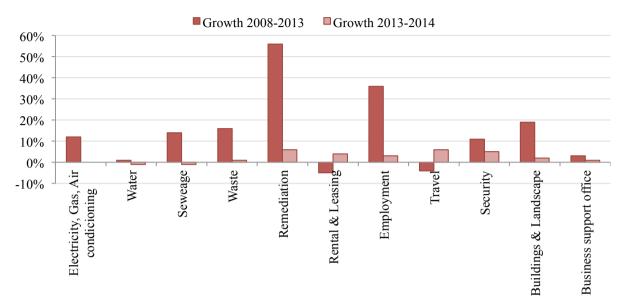
Annex II. ECONOMIES PARTICIPATING IN THE 2015 GEM SURVEY

	FACTOR DRIVEN	EFFICIENCY DRIVEN	INNOVATION DRIVEN
AFRICA	THE TOR DRIVE	ETTTOILIVET DIRTYLIV	Introvition DRIVE
-	Botswana	Morocco	
	Burkina Faso	South Africa	
	Cameroon		
	Egypt		
	Senegal		
	Tunisia		
ASIA & OCEANIA			
	India	China	Australia
	Iran	Indonesia	Israel
	Philippines	Kazakhstan	Japan
	Vietnam	Lebanon	Republic of Korea
		Malaysia	Taiwan
		Thailand	
		Turkey	
NORTH AMERICA & I	LATIN AMERICA & CARI	-	
	and a drift	Argentina	Canada
		Barbados	United States
		Brazil	Sinted States
		Chile	
		Colombia	
		Ecuador	
		Guatemala	
		Mexico	
		Panama	
		Peru	
		Puerto Rico	
EUROPE		Uruguay	
EUROI E		Bulgaria	Belgium
		Croatia	Finland
		Hungary	Germany Greece
		Estonia Latvia	Ireland
		Poland	Italy
		Romania	Luxemburg
		Macedonia	Netherlands
		iviacedoma	
			Norway
			Portugal
			Slovenia
			Slovakia
			Spain
			Sweden
			Switzerland
			UK

Source: (Kelley, Singer, & Herrington, 2016)

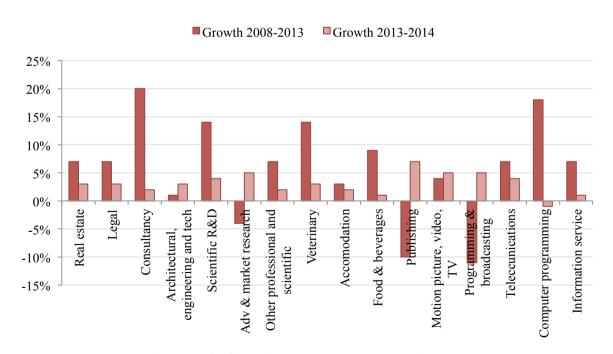
Annex III. DETAILED GROWTH TRENDS IN SME EMPLOYMENT IN EU28, 2008-2013 AND 2013-2014

Annex III. 1. HIGH PERFORMANCE SECTORS



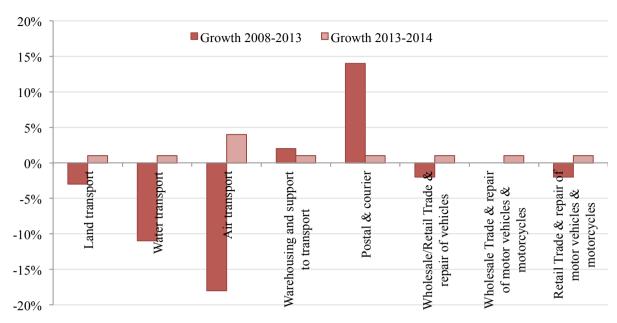
Source: Eurostat, National Statistical Offices; (European Commission, 2015)

Annex III. 2. MEDIUM PERFORMANCE SECTORS



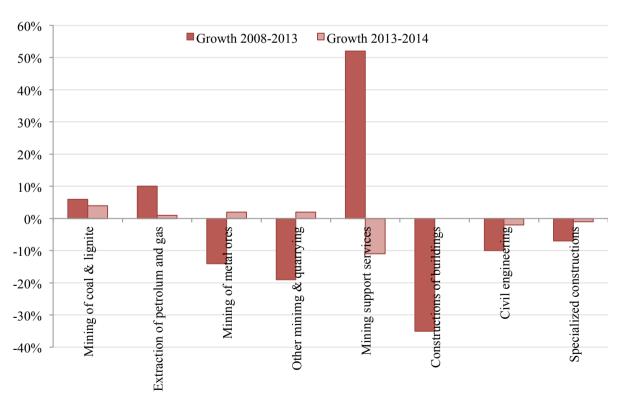
Source: Eurostat, National Statistical Offices; (European Commission, 2015)

Annex III. 3. MEDIUM PERFORMANCE SECTORS



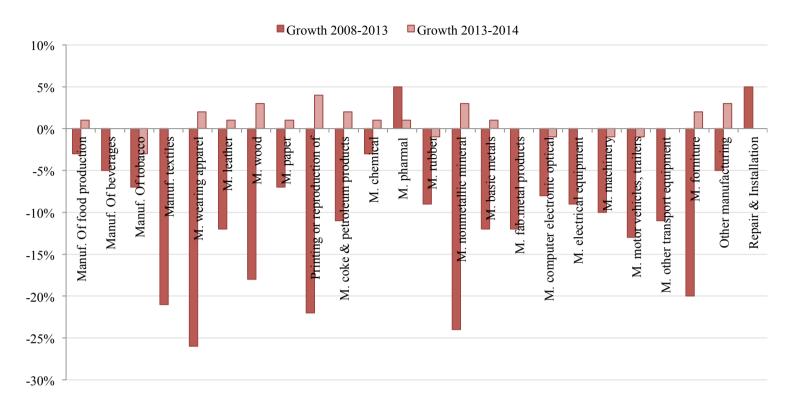
Source: Eurostat, National Statistical Offices; (European Commission, 2015)

Annex III. 4. Low Performance Sectors



Source: Eurostat, National Statistical Offices; (European Commission, 2015)

Annex III. 5. Low Performance Sectors



Source: Eurostat, National Statistical Offices; (European Commission, 2015)

Annex IV. SURVEY

Name of the firm:

Number of employees:

- 0 10
- 11 50
- 51 250
- > 250

Turnover range:

- ≤ EUR 2 million
- ≤ EUR 10 million
- ≤ EUR 50 million o Total Balance Sheet ≤ EUR 43 milioni
- > EUR 50 milioni

Degree of autonomy

- Autonomous
- Partner
- Linked enterprise

Are you a start-up?

Which of these tenses represent your company features:

- R&D on total costs $\geq 15 \%$;
- At least 2/3 of the staff (dipendenti o collaboratori) has a master's degree;
- The company is the owner, custodian, or licensee of at least one patent related to

industrial inventions, biotechnology, a topography of semiconductor product or a new plant variety

- Primarily or exclusively activity Subject: Technological Innovation;
- None of the above.

Which are the main reasons to build such collaboration?

- Share costs:
- Share risks:
- Share resources:
- Share revenues;
- Innovate
- Have a better market positioning;
- Increase efficiency;
- Internationalize;
- Other:

Objectives and risks of both parties were clarified before the collaboration?

Did you create a complete Business Case with Vision, Mission, Strategy and Business Plan?

All firm and employees were completely positive and proactive?

Did you use some of these actors to support the collaboration?

- Accelerators;
- · Digital platforms;
- Incubators;
- Financial institutions / Banks;
- None.

Which instruments were used to attract possible partners?

Criteria to evaluate possible partners:

- Complementary competences;
- Available resources;
- Due diligence;
- Compatible objectives;
- Cooperative attitude;
- Easy communication;
- Connected risks;
- · Reliability;
- Guarantees:
- Previous collaborations with similar partners.

Which are formal tools that were implemented in the collaboration?

- Financial models of costs;
- Financial models of profits;
- Financial models of revenues;
- Financial models on property rights;
- Legal structures: exclusivity;
- Legal structures: non-competition;
- Legal structures: exit fee;
- Organizational structures: inter-org teams;
- Organizational structures: definition of decision makers:
- Organizational structures: definition of people involved in the project;
- Totally joined organizational structure;
- None of the above.

Which is the degree of autonomy in the collaboration?

- Total autonomy;
- Only in financial resources (investments);
- Presence of directives;

- Collaboration in the design;
- Collaboration in the development;
- Total co-creation;
- Collaboration in marketing and commercialization.

How was done the monitoring?

There were any changes in legal, financial, or organizational aspects?

Challenging aspects in the collaboration:

- Awareness of reciprocal needs;
- Analysis of possible risks;
- Analysis of possibilities of failure;
- Behavioural alignments in all departments;
- Build a joint design;
- Communication:
- Knowledge transfer;
- · Reliability
- Share of technological information;
- Increasing complexity of the collaboration;
- Balance of the degree of control;
- Professional arrogance;
- Different timing;
- Flexibility
- Adaptability;
- Reciprocal commitment;
- Opportunistic behaviour.

Which is the degree of INTEGRATION in the most important asymmetric collaboration you experienced?

- Informal collaboration;
- Supply agreement;

- Contractual agreement;
- Equity Partnership;
- M&A partial or total.

Which is amount of RESOURCES involved in the most important asymmetric collaboration you experienced?

- Innovation already existent + Few additional resources or managerial attention;
- Investment for the specific project + Additional resources and managerial attention;
- Capital investment + Synergies + High managerial attention + Control;
- Co-creation + Capital investment + High managerial attention + Control for the full innovative process.

Which are the possible advantages of the collaboration?

- Access to financial resources;
- Solution to size related problems;
- Decrease of risks;
- Access to complex processes;
- Access to marketing resources;
- Access to commercial resources;
- Access to managerial expertise;
- Access to regulatory expertise;
- Brand reputation;
- Institutional legitimacy;
- Networking;
- Dynamism;
- Innovativeness;
- Easier and faster processes;
- Company culture renovation;

- Access to key skills;
- Access to new technologies;
- Awareness of future trends;
- Closer to consumers and clients;

- Access to potentially disruptive outcomes;
- Quicker response to market changes;
- Access to niche competences.

The collaboration was successful? If not, why?

Annex V. LIST OF SURVEYED START-UP

Archetipo	BY-entO
Skopia srl	Bloovery
Babylon Cloud srl	Cheetah medical
Ajile srls	Daard srl
BBZ srl	Civitanavi Systems
bedimensional srl	Blu InnovationMedia
FOM	Climalia
Axyry srl	Digital Business Innovation Srl
AtBoat	cofyp s.r.l.
AMC	Coach&Play s.r.l.
Avanix sr	Datatellers
Powersint S.r.1.s.	BTREES
Real Luxury Merchandising srl	DBS SRL
4c srl	Desamanera srl
Badaplus srls	Dreamlab srls
Mostrami Srl IS	E-Italy srls
24booking srl	Dynamitick
Appocrate srl	Building App
BindCommerce srl	Blend srl
Biovalene srl	C2b4food srl