Social Impact Incubators or the Social Impact of Incubators: a comparative analysis of Italian organizations

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“Yet it is not our part to master all the tides of the world, but to do what is in us for the succour of those years wherein we are set, uprooting the evil in the fields that we know, so that those who live after may have clean earth to till.”

(J. R. R. Tolkien, The Lord of the Rings - The Return of the King)
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Almost obvious, but not less important, are the thanks to my family. They have supported and, sometimes, endured me for quite some years by now. I should remember to ask them how.

Thank you also to my friends. Some walked with me for many years, some for less, but, without them, it would have been a much sadder journey.

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Davide
Abstract

The context in which we live is characterized by political, financial, economic and environmental instability: in such a system, problems like migration, unemployment, social exclusion, climate change, etc. are exacerbated. Social businesses are increasingly seen as viable solutions to help solve these problems in an innovative way. At the same time, startups are considered tools to bolster local development and innovation. It is only natural for organizations that support these businesses to become important. Unfortunately, in Italy, researches on such organizations are somewhat lacking. Therefore, this work aims at analyzing (using data from a survey and from the database AIDA) the Italian situation on incubation, with particular attention to social businesses support and comparing organizations, that provide incubation services, on the basis of their focus on social businesses. The results of the study show how social incubators, while sharing some aspects with other typologies of incubator, seem to have their own peculiar traits. Moreover, they do not seem to have a significantly different effect on their incubatees’ revenues in respect of other typologies of incubator, but they do seem to have a better influence on the growth of employees.
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Chapter 1

Introduction

The socio-economic context in recent times is characterized by instability: political, financial (emblematic is the 2008 financial crisis), economic and environmental (section 3.4.2). In this context, in view of a system with low resilience, problems are born: mass migration, poverty, social exclusion, unemployment and other are or exacerbated or made even more difficult to tackle. For example, the aging of the population, the increasing health costs and the health divide, diversity problems, climate change, increase needs of resources like energy and water, etc.

Tackling these challenges has been a traditional prerogative of states or, in some cases, of philanthropic organizations, but the system is changing together with the needs of the actors involved and every challenge comes with a facet of opportunity (EC, 2013). To be fair, the rise of the social sector in the face of distress and repeated failure in solving problems, is not something new. For example, cooperative-like organizations were born in Italy as a response to the government’s inability to solve challenges like unemployment, drug abuse, homelessness (Borzaga et al., 2014; Chirico et al., 2014).

Together with that, there is the recognition of innovative small new businesses as a tool to bolster local development and innovation, therefore, it is only natural that tools to support and encourage these, sometimes fragile, businesses are considered important, tools like business incubators (Carrera et al., 2008; Ahmad and Ingle, 2013).

Taking the opportunities offered by trying to solve societal challenges, or in other words, the heart of social innovation has been studied for a relative short time, for Caulier-Grice et al. (2012) the studies on social innovation as “commonly” intended were done in the last fifteen years, while Phillips et al. (2015) consider the last thirty years enough to unearth the very roots of social innovations literature. Hubert et al. (2014) found that the attitude towards social innovation grew considerably better only in the last decade: the interest of many players grew and research on the topic started to become more common
and widespread. Social incubation in Italy started to show itself in some raw forms in the first years of the 2000s, but most of social incubators were founded later (Casasnovas and Bruno, 2013; Miller and Stacey, 2014) and are still evolving, therefore, it is clear that there is a lack of studies in the field, given, also, that the subject of the research is somewhat lacking (Giordano et al., 2015). It should be noted that in recent years also “traditional” business incubators took interest in the field and in some cases, they have introduced ad hoc programs.

In addition, official recognition for incubators and startups came (in Italy) only in 2012 with the “Decreto Crescita 2.0” (while a form of social enterprise was recognized in 2006 (Italian Government, 2006) and social cooperatives in 1991 (Italian Government, 1991)). Starting from the lack of studies in the social business incubators field, the first mapping of the Italian situation is, in fact, quite recent (Giordano et al., 2015), and taking in account the absence of comparative studies between organizations that support traditional businesses and others that focus, at various degrees, on social businesses, this work aims at: analyzing and mapping the Italian situation on incubation, with particular attention to social businesses support and comparing organizations, that provide incubation services (or similar services), on the basis of their focus on social businesses. The thesis will be structured in the following way: the first chapter will be dedicated to the review of the literature, in order to define a framework for the development of the work itself. The review will cover the main points of the following topics: social innovation, business incubators, social business incubators, context and performances.

The second chapter will be about the methodology used for the research. It will cover the creation of the list of incubators, of the database and of the survey, the administration of the latter, the phases of data cleaning and analysis.

The third chapter will be, instead, dedicated to the analysis of the results. A number of tools will be used: map charts, bar charts, radar charts, histograms, observations based on the average and median values and on standard deviation, cumulative sum charts, comparisons with previous studies and econometric analysis.

The fourth, and last, chapter will present the conclusions.
Chapter 2

Executive summary

2.1 Literature review

**Incubators**, a brief summary of their **history**.

The first business incubator was the Batavia Industrial Center opened in 1959 in the city of Batavia, in the west of the state of New York (Aernoudt, 2004; Hackett and Dilts, 2004; Carrera et al., 2008; Battistella et al., 2017). The center was born after a big corporation left the area and a large building with it, a local real estate developer, not being able to find someone that would occupy the whole space, decided to divide it into smaller spaces and rent them to individual tenants, whom sometimes asked for advice or business-related assistance (Hackett and Dilts, 2004).

Until 1980, the diffusion of business incubators was slow and mainly led by the USA government’s effort to curb the degradation of urban area and economy (Hackett and Dilts, 2004), but also some universities and research centers came into play (Hackett and Dilts, 2004; Carrera et al., 2008).

In the 1980s, business incubators became fully recognized entities, in terms of public, academic and governmental recognition (Theodorakopoulos et al., 2014), and had a significant diffusion and at the same time, speaking in a general way, research on business incubators spurred (Hackett and Dilts, 2004).

Moving to Europe, one of the first business incubator was established in 1975 as a subsidiary of British Steel, called British Steel Industry; the objective was to create jobs in the areas of the United Kingdom that were affected by the closure of steel plants (Aernoudt, 2004). In 1983 the University of Berlin found the first German incubator with the intent of facilitating technology transfers, France followed close-by in 1985 with a business incubator created within the Antipolis Technology Park (Aernoudt, 2004). Between the last two, in 1984, the European Union founded the European Business Innovation Network...
(EBN), a network of BICs (Business and Innovation Centres) that in the large part of cases offer incubation-like support (Aernoudt, 2004).

In Italy, similarly to other parts of the world, business incubators were initially located in areas struggling economically, like where factories were closing and in some depressed areas of the south (Ahmad and Ingle, 2013; Auricchio et al., 2014). The first incubator in Italy was a Business Innovation Center, specifically, “BIC Liguria”, that was founded in 1990 in the industrial area of Genoa that was seeing an important decline that was probably the reason it was founded there (Ahmad and Ingle, 2013).

Since 2000, incubation acquired prominence in the government agenda and was increasingly seen as a tool to bolster and encourage entrepreneurship and, as a consequence, the local development (Carrera et al., 2008; Ahmad and Ingle, 2013). In the same years, business incubators from private initiatives started to flourish (Auricchio et al., 2014).

A milestone for business incubators and social enterprises was the “Decreto Crescita 2.0” of 2012 (Italian Government, 2012) that instituted the “certified incubator” and the “innovative startup with a social vocation”.

The law can be seen as a proof of the attention of the Italian government to the topic of incubation, social business and newly formed businesses in need of assistance and therefore of their prominent role in the Italian social and economic landscape.

Regarding the typologies of incubators treated in literature, Barbero et al. (2012) present a handy summary (fig. 2.1) of the ones with more support. The authors make, also, an interesting statement: the model that they present is applied to Spain, but, following the example of Aernoudt (2004), they say that it could be applied also to other southern Europe countries, like Italy.

Social business incubators are, unfortunately, not present in the typologies of Barbero et al. (2012), to remedy that I will introduce the definition used for the study.

An organization that supports actively the process of creation and development of new innovative enterprises, predominantly with a significant social (including environmental) impact, through the direct or indirect provision of services and resources

In the definition, the legal form is not specified, but it is left generic, because the incubator can have the legal form that suits better, also a hybrid one, in order to have the freedom of a trading company and the benefit of an association (Giordano et al., 2015). A certain degree of pro-activity is required from the incubator, otherwise its role would be too close to the one of a landlord or a “services mall”. The incubator is focused on the phases of both creation and development, therefore on new ventures that should be innovative in some way (it should have an element of novelty, while it is not necessary that it is original, never seen, it should be relatively new (new to the sector, the market,
the use, etc.). This means that an innovation can be a mixture of other elements or a fusion between models). The mainly social and environmental scope of the incubatees, finally, is the greatest difference with a “traditional” incubator. Given the ambiguity of the term in Italy and especially in the social sector and the lack of substantial corpus of studies, the definition wants to be broad enough to not overlook any example that could be social incubation.

Regarding the services that incubators offer, some are frequently cited in the literature and can be divided into some categories (fig. 2.2). These services are not offered only by incubators, but also by other players, therefore, an incubator, to be considered as such, should offer services in almost all categories (Von Zedtwitz and Grimaldi, 2006).

But why incubators are useful? Carayannis and Von Zedtwitz (2005) say that entrepreneurs that found new start-ups have two main problems: on one hand, they do not know for sure if it will be successful, on the other hand, they do not have many resources (e.g. time and money) to ascertain it. So, in order to avoid problems like a too long time to market, smaller revenues or hiring the wrong employees, newly formed firms can go to
business incubators that offer to accelerate the development of the business, shelter the firm from external disturbance and generally reducing the uncertainty and the mistakes, allowing the entrepreneurs to focus their attention on the core parts of their business (other authors talk about “liability of newness and smallness” when speaking about the discrepancy between the resources necessary to survive and the ones that the new venture has).

Regarding performances and social impact measurement, it should be understood why they are important. One problem is about resources, incubators and firms need resources to work, the funders and also the participants of an incubation program, want to know if their time and money will be well spent and to compare the option to others (Hubert et al., 2014; Lall et al., 2014; Irene et al., 2016). Another problem is about legal recognition and ad-hoc policies, it is hard to get the support of a policy-maker if there is no hard proof that the initiative is going to be beneficial for the country (Hubert et al., 2014; Irene et al., 2016). Then, measurement is about communicating with a broad range of stakeholders, it is harder to be credible without any reliable data, in front of both shareholders and the public opinion at large (Hubert et al., 2014; Irene et al., 2016). Finally, measurement is fundamental to improve, to control operations and to plan ahead to achieve the desired results, this is true for both social and traditional businesses (Irene et al., 2016).

Irene et al. (2016, p. 3) notice that performances measurement in a social setting has obstacles to overcome:

- it is usually a multi-objective and multi-stakeholder environment (this is often valid also for traditional incubators (Bergek and Norrman, 2008));
• social impact has more often than not a qualitative nature (also Hubert et al. (2010));
• changes and benefits that are sought after may happen in the long term;
• due to the previous points the attribution of the effect to the cause may be difficult;
• due, again, to the previous points the costs, and the capabilities required for the measurement may be quite high (also Hubert et al. (2010)).

Even in the face of these problems, many tools and guidelines for social impact measurement have been born, I would like to show the guidelines summarized by Hubert et al. (2014, p. 27) that, while general and brief by construction, raise some points that deserve attention:

The process of creating a performance measurement system

1. identify objectives;
2. identify stakeholders;
3. set relevant measurement;
4. measure, validate and value;
5. report, learn and improve.

All stages should involve active stakeholder engagement. In particular, the number and range of indicators should be agreed between the social enterprise, beneficiaries or service users as well as investors, allowing for lighter and cheaper processes for small ventures. The dynamics of involving all stakeholders (from investors to service users) is designed to maintain the balance between the overriding need to deliver measurable social impact and the need for a profitable operation that can meet investor expectations (Hubert et al., 2014, p. 27).

### 2.2 Methodology

The pre-analysis phase was subdivided into four main stages. First, researches have been carried out in order to identify incubators/accelerators operating in Italy, in order to do that a combination of lists present in articles of specialized journals and websites about the topics of incubation and startups, and internet searches were used. Subsequently, a database was created containing the information gathered regarding each individual organization identified (e.g. contacts, number of incubatees, company name, financial
This stage was followed by the creation of a survey (both using an online tool and in Microsoft Word format) aimed at collecting information for 2016, that was to be submitted to the aforementioned organizations, the survey was created consulting examples from the literature, taking into account the research questions and was refined with the help of a panel of experts (annex B). The organizations were then contacted by e-mail and/or telephone.

After the closure of the survey, the data were consolidated on a single file. The data checking included:

- elimination of multiple answers (when the same organization left incomplete answers before providing a final complete answer);

- transformation of data in a common and suitable format (e.g. transform numeric values written in words in a common numeric format);

- check for incomplete data, noise and inconsistency. These causes of low quality of data were actively addressed and when possible were solved in both direct (contacting the respondent) and indirect way (searching for other information that could clear doubts) and often double checking direct and indirect sources. If a solution was not possible, the data were disregarded for the relevant analysis.

The following phase was the data analysis. First, data were analyzed in a visual way through the use of map charts, bar charts, radar charts. The initial analysis included also histograms, observations based on the average and median values and on standard deviation, cumulative sum charts and comparisons with previous studies.

Second, an econometric analysis that aimed to explore the relationships between incubatees’ growth in revenues and employees was carried out. Starting from the names provided by thirty-one incubators, the relevant information was extracted from AIDA. From the 423 firms found, the ones founded before 2011 were excluded (the reason was to focus on new businesses, five years is the limit that the law on innovative startup in Italy declares for a startup to be considered as such), the ones whose growth could not be computed and the ones that did not have enough data regarding 2015 (as they were founded in 2015) were also excluded. The resulting databases were of 123 records for the employees’ growth and of 118 for the revenues’ growth. The variables included, other than the two dependent ones, were the dummies for the typologies of incubator, the age of the incubator, the age of the startup, the geographic macro-region of the startup, the number of the employees of the startup in 2015 and 2016 (only for the revenues’ growth), the number of incubatees (2016), presence of the certification for the incubator, presence of direct financing.

First, correlations tables were made, then a linear regression, then taking into account
that the dependent variables were censored (one cannot observe a decrease of more than 100 per cent) a Tobit model was used (the relevant tests that could be done, were made and raised no cause for concern). The software used was STATA. Specifically, both the regression and the Tobit model were done starting from a model containing only the dependent and independent variables, then the others were added if the adjusted R squared increased (for the Tobit, it was used the McFadden’s adjusted pseudo R squared, computed separately).

2.3 Results

2.3.1 Preliminary overview

What is presented here is a highlight of the results obtained from the study.

![Diagram showing organisations contacted and accepted answers](image)

**Figure 2.3:** Organizations contacted and accepted answers

Regarding the accepted answers, there are the ones of incubators, accelerators and co-working spaces that provide managerial support, this because the line between them is not always neat, even more, when the organization is “social”, and that is valid also in Italy. To add some detail, the co-working spaces included were the ones that answered the survey and said to provide managerial support, the others were not included, therefore, it can be considered a kind of self-selection.

In order to compare incubators with different social focus, they were divided based on the percentage of social businesses incubated (in fact in the survey they were asked both the number of organizations incubated and the number of social businesses incubated):

- **Business Incubators**, number of organizations with a significant social impact
incubated equal to zero;

- **Mixed Incubators**, number of organizations with a significant social impact incubated between one and the 50 per cent (values are rounded);

- **Social Incubators**, number of organizations with a significant social impact incubated between 51 and 100 per cent (values are rounded).

The total is not equal to the number of answers as some missing data prevented the assignment to typologies. It is interesting to notice how the answers of more social-oriented incubators are equal in quantity to the ones of business incubators.

Growth in the number of incubators has occurred especially in recent years (fig. 2.5), in fact, a greater slope in the curve can be noticed, and the median value is “2012”, meaning that at least half of the incubators were born until that year, while the rest were concentrated in the following years.

It is interesting to notice the peak in the year 2013 that may be due to the effect of “Decreto crescita 2.0” of 2012.

Moreover, the oldest incubators are either business incubators or mixed ones (it is fairly probable that mixed incubators started as business ones and later expanded their scope), while social incubators are concentrated in recent years (fig. 2.6). This is even more evident when looking at the average age of the incubators divided by typologies: social incubators have around half the age of the others (fig. 2.7).

Networking is the service provided to most of the incubatees (fig. 2.8), it seems, therefore, that creating or facilitating relationships is a distinctive trait of Italian incubators. Among the services provided to the great majority (more than 70 per cent), there are, also, access to finance (direct or indirect), physical space and shared services and managerial support. Training, while not among the less provided is neither among the most, it seems, therefore,

<table>
<thead>
<tr>
<th></th>
<th># of answers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business incubator</td>
<td>39</td>
<td>0.50</td>
</tr>
<tr>
<td>Mixed Incubator</td>
<td>30</td>
<td>0.38</td>
</tr>
<tr>
<td>Social Incubator</td>
<td>9</td>
<td>0.12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>78</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Figure 2.4: Incubator’s typologies: summary*
that closing the gaps in business skills is not a priority. At lower ranks, there are support
to technology development and scouting and IP management support, this may be linked
to the fact that they are useful only to a subset of the tenants. Then, there are the
administrative and legal services, these, while useful, especially for an organization with
little experience, may be not considered core to the incubator. The services provided
to the lowest number of incubatees are the social impact measurement services and the
formation/consulting on business ethics and CSR. It is a clear sign that this kind of services is still not diffused, and offer or demand is lacking.

Looking at the chart with data divided by typology of incubator (fig. 2.9), networking is still among the highest, with a 95.5 per cent for mixed incubators and a much lower value for business incubators. The services that were highly provided in the aggregated data are still consistently provided by almost all typologies of incubators, interestingly, physical space and shared services is the most provided by business incubators. For social incubators, the situation is different as physical space and related services are provided to a little more than half of the incubatees. Training seems to be particularly important for mixed incubators. Regarding the services related to the social aspect of business, the real difference is in social incubators that reach around the 53 per cent for social impact measurement services and 40 per cent for formation and consulting on business ethics and CSR. While they show largely higher value than the other typologies of incubators, it is surprising that they are not higher as they are focused on the social dimension of businesses. It seems, therefore, that, while the attention for the social dimension is growing, the road for a real integration of it in the culture is long.

Incubated organizations are largely for-profit (fig. 2.10). This does not mean that they do not have a positive social impact, but only that is not predominant in the organization.
Hybrid organizations are intended as for-profit organizations that have explicit social or environmental objectives among their goals (e.g. “startup innovativa a vocazione sociale”, “impresa sociale”, “B-corp”, etc.).

Business incubators have a vast majority of for-profit companies (fig. 2.11), the social ones are the highest regarding hybrid and non-profit enterprises, while the mixed ones are polarized on for-profit. To be fair, in order to work on “social” challenges or to have a significant and positive social impact, it is not necessary to be a hybrid or non-profit organization. Moreover, some incubators have only some programs specific for social enterprises (so they are only a small part of the incubatees), and large and unfocused incubators may have in the portfolio some social enterprises that have simply passed their selection process.

2.3.2 Econometric analysis

The name of the variables used and the respective meaning can be found in the following figure (2.12).

From the correlation table (figure 2.13), it can be seen that the incubator’s age, startup’s
Figure 2.10: Typology of organizations (aggregated data) \( n=78 \)

Figure 2.11: Typology of organizations \( n=73 \)

age and direct financing are significantly (0.05 level) correlated with the revenues’ growth. Looking, instead, at the other correlation table (figure 2.14), it seems that the only variable correlated with employees’ growth is the dummy related to the social incubators. The best result with the Tobit regression (revenues’ growth) was obtained with the variables age of the startup and direct financing (figure 2.15). The coefficients of the model

14
### Figure 2.12: List of variables for the econometric analysis

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Meaning</th>
<th>Variable category</th>
</tr>
</thead>
<tbody>
<tr>
<td>rev_change</td>
<td>Revenues’ growth between 2015 and 2016</td>
<td>Dependent Variables</td>
</tr>
<tr>
<td>emp_change_m</td>
<td>Employees’ growth between 2015 and 2016</td>
<td></td>
</tr>
<tr>
<td>B_inc</td>
<td>Dummy: Business incubator</td>
<td></td>
</tr>
<tr>
<td>S_inc</td>
<td>Dummy: Social incubator</td>
<td></td>
</tr>
<tr>
<td>M_inc</td>
<td>Dummy: Mixed incubator</td>
<td></td>
</tr>
<tr>
<td>inc_age</td>
<td>Incubator’s age</td>
<td></td>
</tr>
<tr>
<td>sta_age</td>
<td>Startup’s age</td>
<td></td>
</tr>
<tr>
<td>area_NO</td>
<td>Dummy: Startup located in the North-West macro-region</td>
<td></td>
</tr>
<tr>
<td>area_NE</td>
<td>Dummy: Startup located in the North-East macro-region</td>
<td></td>
</tr>
<tr>
<td>area_C</td>
<td>Dummy: Startup located in the Center macro-region</td>
<td></td>
</tr>
<tr>
<td>area_S</td>
<td>Dummy: Startup located in the Mezzogiorno macro-region</td>
<td></td>
</tr>
<tr>
<td>dip_16</td>
<td># of employees of 2016 (startup)</td>
<td></td>
</tr>
<tr>
<td>dip_15</td>
<td># of employees of 2015 (startup)</td>
<td></td>
</tr>
<tr>
<td>inc_16</td>
<td># of incubates in 2016</td>
<td></td>
</tr>
<tr>
<td>cert_6_11</td>
<td>Dummy: listed as certified incubator</td>
<td></td>
</tr>
<tr>
<td>dir_fin</td>
<td>Dummy: the incubator does direct financing</td>
<td></td>
</tr>
</tbody>
</table>

### Figure 2.13: Correlation table (revenues’ growth database)
are not all simultaneously zero with high probability and both the age of the startup and direct financing result significant (at 0.05 level) and neither of them includes zero in its confidence interval (the null hypothesis, therefore, can be rejected). The age of the startup seems to have a negative effect on the growth of the revenues. One interpretation could be that newly formed firms start with very low revenues that, in relative terms, grow very fast (the growth in percentage is therefore high), the same does not come so easily for more mature firms with higher revenues that, in order to obtain the same growth level, should increase their absolute revenues in an exorbitant way. The presence of direct financing, instead, has a clear positive effect on the revenues. The reasons could be that a reliable source of capital helps growth or that the possibility of an investment spurs growth or maybe it is a sign of a more revenue-oriented incubation program/startup. The best result with the Tobit regression (employees’ growth) was obtained with just the independent variables (figure 2.16). The coefficients of the model are different from zero at a weakly significant level and the only significant variable (0.05 level) is the dummy related to the social incubators and it has a clearly positive effect on the growth of employees.
| Variable  | Coef.  | Std. Err. | t     | P>|t|  | [95% Conf. Interval] |
|-----------|--------|-----------|-------|-------|---------------------|
| S_inc     | 1.809103 | 2.174098  | 0.83  | 0.407 | -2.497767 , 6.115974 |
| M_inc     | 1.360087 | 1.085792  | 1.25  | 0.213 | -0.24517 , 3.036103 |
| sta_age   | -1.002309| 0.4687257 | -2.14 | 0.035 | -1.938815 , -0.0657266 |
| dir_fin   | 2.536856 | 1.214911  | 2.09  | 0.039 | 1.301269 , 4.943586  |
| _cons     | 4.034258 | 2.042366  | 1.98  | 0.051 | -0.0116522 , 8.080169 |

/\sigma | 5.36003 | 0.3541351 | 4.658491 | 6.061556 |

3 left-censored observations at rev_change <= -1
115 uncensored observations
0 right-censored observations

---

| Variable   | Coef.  | Std. Err. | t     | P>|t|  | [95% Conf. Interval] |
|------------|--------|-----------|-------|-------|---------------------|
| S_inc      | 1.516702 | 0.627986 | 2.42  | 0.017 | 0.2734488 , 2.759955  |
| M_inc      | 0.467664 | 0.3634502 | 1.12  | 0.264 | -0.318812 , 1.12721 |
| _cons      | 0.052873 | 0.2923015 | 0.18  | 0.857 | -0.5258149 , 0.631561 |

/\sigma | 1.830274 | 0.119916 | 1.592861 | 2.067686 |

5 left-censored observations at emp_change_m <= -1
118 uncensored observations
0 right-censored observations

**Figure 2.15:** Tobit results (revenues’ growth database)

**Figure 2.16:** Tobit results (employees’ growth database)
2.4 Conclusions, limits and further research

I would like to highlight the value of this study: it is one of the first for the Italian social incubators’ ecosystem and has collected a relevant quantity of data (while maybe not exceptional).

In a nutshell, social incubators, while sharing some aspects with other typologies of incubator, seem to have their own peculiar traits. Moreover, they do not seem to have a significantly different effect on revenues’ growth (this means that while the effect is not consistently better, it is not consistently worse either, the latter can be considered an achievement in itself, given the social focus), but they do seem to have a better influence on the growth of employees.

Studies on the Italian system of incubation focused on the social aspects are somewhat lacking and this study was meant to be a first step in the understanding of the topic. Given the wide scope and the limited resources available: the two most important limits are the quantity and the level of detail of the data. Not having those two limits would have led to more significant results and richer insights and would have given the ability to detect more subtle differences.

Another limit is related to the use of relative values (growth in percentage) as dependent variables: incredible growth may be minimal in absolute terms.

The limits of this study are where further research should be going. From one point of view the same research done with more data would allow to have more significant results and detect more subtle differences, from the other, every aspect treated in this research has just been poked and could be wide enough to fuel an entire study (possible questions could be what problems do social incubators find in the incubation of social businesses? Or what kind of measurement do they use for performances? Did the incubatees attend an entire incubation program, only a part, at what point of it were they in 2016?). Extending the study to multiple years or to other countries would also be viable and interesting developments.
Chapter 3

Literature Review

3.1 Social Innovation

3.1.1 Definition

Social innovation, like many concepts that I am going to present later, is hard to define. This is due to various factors:

- the term “social innovation” has been used for different purposes during the course of history. For describing changes in the society led by social movements, governments or the private sector, new organizational models that were more effective or better in some aspects, the development of projects, services, products, sometimes it was linked very closely with social entrepreneurship or with model for empowerment and involvement of people (Caulier-Grice et al., 2012). Other studies wanted to pinpoint when the term first appeared in literature: Hubert et al. (2010) find in Weber and Durkheim in the late 19th a first use, related to the effects of innovation on the organization of work and society, while in the early 20th they point to Schumpeter, related to the role of innovation and change in the organization of society. They also claim that the term came back again in the end of the 20th, related to problems like high unemployment rate or phenomena like the shifting to a service economy. Phillips et al. (2015), in their review, indicate the work of Rosabeth Kanter (1998) regarding corporations embracing “corporate social innovation” (their database of articles did not contain works pre-1987). Caulier-Grice et al. (2012) cite studies in the realm of social sciences starting from the 1960s;

- “social innovation”, as intended by many definitions, is not a recent fact. Mulgan et al. (2007), make examples of social innovation starting from the 19th century:
new models of university education, collective insurances and trade unions, the kindergarten, cooperatives and self-help groups, reading and sports clubs, microcredit and, later in the 20th century, new models for childcare, housing, community development, social care and the welfare system, but also social movements like the “Green” one, feminism and others that fight for civil rights, etc.;

• the corpus of research that studies social innovation as “commonly” intended is mostly concentrated in the last fifteen years, therefore is quite recent. Caulier-Grice et al. (2012) claim that the research conducted on social innovation from about the year 2000 may stem from the dissatisfaction of the research and policies’ focus on economics and innovation and as a response to growing social challenges. Hubert et al. (2014) noticed how, in the last decade, attitudes toward social innovation changed: various players showed increased interest and research developed and spread. Phillips et al. (2015) considered a period of twenty-five years (from 1987 to 2012) enough to unearth the very roots of academic contribution on social innovation;

• the research is far from being cohesive and consensus from being achieved. While reading scientific articles and reports that engage in a review of the literature regarding social innovation, more often than not it is declared that a consensus about the definition has not been reached. Some say that social innovation is still “ill-defined” (OECD, 2010, p. 186), others speak about “no definite consensus” (EC, 2013, p. 5), but a “summary” sentence can be: “definitions of social innovation abound and a casual observer can quickly become entangled in a debate over meaning and nuance” (Hubert et al., 2010, p. 33).

Before starting reviewing some definitions, I would like to point out a comment of Caulier-Grice et al. (2012) where they say that there are many definitions that are too narrow and exclude many examples that can be considered social innovation, while others are broad enough to include programs or organizations that lack of innovativeness, while being social to a certain degree.

I will start with Mulgan and colleagues that define social innovation as “innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly developed and diffused through organisations whose primary purposes are social” (Mulgan et al., 2007, p. 8).

In this definition, three important points can be found.

First, it is about “activities and services”, the use of the term “activities” implies a boundless range of possibilities and the idea that social innovation can be done in many ways
and in every sector (in their work they admittedly concentrate on replicable models and programs, though). Second, the social aspect, both the aim and the motivation should be social in nature (Phills et al. (2008) notice that motivation cannot be considered the only distinction as it is not possible to observe it), therefore excluding the activities that while having a social impact, even a positive one, do not have it as the primary goal, but just as a side effect. Third, the use of the world “predominantly” and the plural in “organizations” indicates that social innovation does not involve only one actor nor exclude outright non-social players. One concept that is left slightly neglected is the meaning of “innovation”, in the article is stressed that there should be implementation and it is different from the incremental improvement of something already existing and sum up the concept, in the same page of the definition, as “new ideas that work”. While the simplicity is appreciated, innovation literature is wide not without reason: here questions remain unanswered. Like: should the innovation be better of a comparable one, and in what aspect? New, as in absolutely new or more in relative terms?

Antadze and Westley (2012) citing themselves from Westley and Antadze (2010, p. 2) propose that “social innovation is defined as a complex process of introducing new products, processes or programs that profoundly change the basic routines, resource and authority flows, or beliefs of the social system in which the innovation occurs. Such successful social innovations have durability and broad impact”. Here, as before, it is possible to see social innovation as not limited in its nature, but, unlike the previous definition, this one stresses the final aim of social innovation that, for the authors, is systemic change. The definition seems to disregard or even mark as failure every social innovation that does not reach a systemic level, but we will explore the concept later, while talking about the stages of social innovation. For now, this definition helps to understand the complexity of the final aim of social innovation as well as the obstacles faced (in terms of, for example, impact measurement or involvement of stakeholders).

A famous definition is the one developed by Phills et al. (2008, p. 36): “a novel solution to a social problem that is more effective, efficient, sustainable, or just than existing solutions and for which the value created accrues primarily to society as a whole rather than private individuals”.

Beside the definition itself, there is something else that is of interest for this section: a thorough explanation on how the definition was built that touches some topics that should be discussed here. First, innovation: it should have an element of novelty, while it is not necessary that it is original, never seen, it should be relatively new (new to the sector, the market, the use, etc.). This means that an innovation can be a mixture of other elements or a fusion between models (concept also found in Mulgan et al. (2007)). It should, also,
be “better” than existing alternatives, while this may appear obvious it is good to eliminate from the definition any doubt. With “better”, it is intended something more efficient or effective and, given the context, the authors also add, rather wisely, “sustainable” or “just”. A choice that will cause debates is the one of considering innovation made of four elements: the process of generating the idea, the outcome of the process that is the “invention” (this is the innovation considered in the definition), the diffusion of the innovation and its societal outcome. Given that the successful implementation of the idea of a product, service, etc. requires a certain adoption of it, the authors consider innovation also something that is not implemented and, in fact, they argue that the intrinsic value of an idea (product, etc.) should be kept distinct from the diffusion. This concept is tricky in a situation that tends to be complex, like the one of social innovation, as one may argue that implementation is the difficult part and how different parties react shapes the idea itself in ways that cannot be fathomed if the implementation does not happen. I will not investigate this topic further as it is not the scope of the thesis and there is a large corpus of research dedicated to it, for the ones interested.

Second, social value: the authors describe it as an increase of gains or reduction of losses for the whole society through the provision of solutions to social problems; the value created in this way should be reaped mostly by the entire society.

The authors decided to use the concept of “value appropriation” to describe social innovation, because, if the value accrues mostly to the individual, traditional market mechanism can manage more or less efficiently the innovation that, therefore, does not need the new definition of “social innovation”, even if it has some social benefit.

While this does not want to be a review of the meaning of the word “social”, I find worthy to cite at least one more report. It will give to the reader a more complete understanding. Hubert et al. (2010) engage in defining what “social” means and distinguishes three perspectives:

- the societal demand perspective is referred to the needs of the most vulnerable member of the society that are usually not addressed, or no more addressed by markets or institutions. This is also what NESTA’s (National Endowment for Science, Technology and the Arts) definition refers to: “social innovation is innovation inspired by the desire to meet social needs which can be neglected by traditional forms of private market provision and which have often been poorly served or unresolved by services organised by the state” (Harris and Albury, 2009, p. 16).

- the societal challenge perspective is referred to a social dimension where the “social” becomes an opportunity to generate value, it is embedded in the strategy and is a driver for growth. Therefore, the lines between social and economic value are blurred
and this could be hard to position in the definition of Phills et al. (2008), if it was not specified that the benefit is directed to the society as a whole.

- the systemic change perspective is about what I introduced before with Mulgan et al. (2007) and is about profoundly modifying human behaviors and the society itself or put in other words: “contribut[ing] to the reform of society in the direction of a more participative arena where empowerment and learning are both sources and outcomes of well-being” (Hubert et al., 2010, p. 40).

OECD (2010, p. 196) presents the first official OECD (Organisation for Economic Co-operation and Development) definition (adopted in the year 2000): “social innovation seeks new answers to social problems by: identifying and delivering new services that improve the quality of life of individuals and communities; identifying and implementing new labour market integration processes, new competencies, new jobs, and new forms of participation, as diverse elements that each contribute to improving the position of individuals in the workforce.

Social innovations can therefore be seen as dealing with the welfare of individuals and communities, both as consumers and producers. The elements of this welfare are linked with their quality of life and activity. Wherever social innovations appear, they always bring about new references or processes.

Social innovation is distinct from economic innovation because it is not about introducing new types of production or exploiting new markets in themselves but is about satisfying new needs not provided for by the market (even if markets intervene later) or creating new, more satisfactory ways of insertion in terms of giving people a place and a role in production.

The key distinction is that social innovation deals with improving the welfare of individuals and communities through employment, consumption and/or participation, its expressed purpose being to provide solutions for individual and community problem”.

This definition links social innovation both to local development and to bigger challenges related to the quality of life. While being a definition from an important organization, one of the first and a rather long one, (and maybe exactly for this reasons) it does not manage to be clear. First, “quality of life” is a quite obscure term, in the sense that is context-sensitive and has not a universal definition (Caulier-Grice et al., 2012). Second, it stresses the role of social innovation in producing better working conditions and work inclusion, but drops, almost casually, the concepts of new needs not yet satisfied by the market (not specifying what needs or why are not addressed) and the problems of individuals and communities again without mentioning which problems or their nature. It is important that in this definition one can find some elements that will be taken up by
other studies, like the emphasis posed on the “process” of innovation.

The next definition that requires attention is the one of Hubert et al. (2010, p. 33) of the Bureau of European Policy Advisers of the European Commission.

“Social innovations are innovations that are social in both their ends and their means. Specifically, we define social innovations as new ideas (products, services and models) that simultaneously meet social needs (more effectively than alternatives) and create new social relationships or collaborations. In other words, they are innovations that are not only good for society but also enhance society’s capacity to act”.

In this definition concepts already seen can be found, like the satisfaction of social needs, a solution that is more effective than others, a concept of innovation that, as specified in the report, includes implementation and the absence of limits in terms of sector or nature of the innovation. What is peculiar, other than the distinguished source, is that the same weight is put on the process that lead to the innovation as well as to the outcome of the innovation itself. In fact, the “good for society” is put at the same level as “enhance society’s capacity to act” that is the result of the process as intended by the definition.

The definition, while rich in meaning, is meant to be overarching, because, at least for the moment, social innovation is a “movement” too broad to be harnessed in a narrow definition. To counteract the danger of a wide-ranging description of the concept (i.e. ends up covering more ground than intended and being meaningless under a practical point of view), they pair a working definition (Hubert et al., 2010, p. 43) to the previous one:

“Social Innovation relates to the development of new forms of organisation and interactions to respond to social issues (the process dimension). It aims at addressing (the outcome dimension):

- social demands that are traditionally not addressed by the market or existing institutions and are directed towards vulnerable groups in society;
- societal challenges in which the boundary between “social” and “economic” blurs, and which are directed towards society as a whole;
- the need to reform society in the direction of a more participative arena where empowerment and learning are sources and outcomes of well-being”.

In order to describe the “outcome” part, they use as a template the dimension of the word “social” presented before, while the first sentence covers the “process” part and gives to it a prominent position, welcoming the ideas of the ones who think that the innovativeness of social innovation does not regard only the outcome, but also how a social problem is tackled.
The last work I am going to analyze in this section is the one of Caulier-Grice et al. (2012). This report is of particular interest for both its results and the way it is built, in fact, it starts by reviewing definitions and summarize the common traits, it then proceeds to create its own definition, but it goes also one step further. Recognizing that the topic is all but defined, it outlines the core elements of social innovation and later it completes them with a set of “common features” that are not mandatory, but are present more often than not (and should be, at least in part).

So, let us start with finding out if the topics found in the definitions review are the same that I analyzed in the previous part of this section.

First, the report reminds that social innovation:

- has many definitions, and by now one can be convinced of that;
- is cross-sectoral, has birth in a complex social system, is based on values and sometimes has not a neat line between social and economic value.

The topic of the complexities that social innovation entails, especially in relation of societal change, have been already made clear, as well as the collaboration and hybridization between social and economic oriented entities, and finally “underpinning values” is just another way to point out the context sensitivity of the term;

- has to be new for who adopts it, must lead to measurable improvement and the fact that the motivation is of social nature is important.

These topics have been already encountered: what is intended by “new” and the result was that there is no need to have something original, that is similar to what is said here; it has been already said that the solution should be an improvement, but here it is specified “measurable” that, from a certain point of view, is obvious and therefore taken for granted, from another, taking in account the difficulties of social impact measurement, maybe it is worthy to specify. Last, there has been discussion about the motivation for social innovation and why it is not enough;

- has a product and process dimension that entails new relationships, governance and empowerment of the beneficiaries.

The double view of social innovation as a new way to do things and a solution for social problems or needs has been already treated in the limits of the scope of this thesis;

- is closely linked with the local community and its development and it is shaped by them and some concepts used to define it are also problematic to define (e.g. “public good”, “quality of life”, “meeting needs”, “societal challenges”). Both ideas were
found in the OECD document previously cited, and it is appropriate to underline how it is better to operationalize a definition or at least put effort in describing the concepts used in order to limit ambiguity:

- is a part of the larger family of “innovation”. I have not cited this point specifically, but I deem that the concept of a “social innovation” not detached from “innovation” itself nor incorporating it is very apparent and quite acceptable, and, therefore, does not need more explanations.

Now, the definition: “social innovations are new solutions (products, services, models, markets, processes etc.) that simultaneously meet a social need (more effectively than existing solutions) and lead to new or improved capabilities and relationships and better use of assets and resources. In other words, social innovations are both good for society and enhance society’s capacity to act” (Caulier-Grice et al., 2012, p. 18). I will not spend much words now on this definition, as a lot has been said before and further characterization will happen later. So, I will just point out that there is no limitation regarding the type of solution or the proper sector that should develop it (it is not even cited) and that the view of social innovation both as a process and as a solution is clearly embraced.

Core elements and common features are shown in figure 3.1. Explanations for the core elements, along with some notes that help to insert them in the debate more smoothly, are in figure 3.2 and for the common features in figure 3.3. Peculiar, it is the choice to exclude all social problems (e.g. poverty, rights, inequalities) from social innovation. The
<table>
<thead>
<tr>
<th>Core elements</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novelty</td>
<td>Social innovations, if not original or unique, are new to the field, sector, region, market or user, or to be applied in a new way or perceived as new</td>
</tr>
<tr>
<td>Meets a social need</td>
<td>Social innovations are explicitly designed to meet a recognised social need. “Explicitly” means that there is an institutionalized motivation. Needs are the ones that if not met cause harm of social suffering (social problems like poverty or rights are excluded in this definition)</td>
</tr>
<tr>
<td>Is more Effective</td>
<td>Social innovations are more effective than existing solutions – create a measurable improvement in terms of outcomes</td>
</tr>
<tr>
<td>Entails implementation</td>
<td>There is a distinction between invention (developing ideas) and innovation (implementing and applying ideas)</td>
</tr>
<tr>
<td>Enhance society’s capability to act</td>
<td>Empowers beneficiaries by creating new roles and relationships, developing assets and capabilities and/or better use of assets and resources (the process dimension)</td>
</tr>
</tbody>
</table>

**Figure 3.2:** Based on Caulier-Grice et al. (2012)

<table>
<thead>
<tr>
<th>Common features</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>New social relationships</td>
<td>Social innovations are developed “with” and “by” users and not delivered “to” and “for” them. They can be identified by the type of relationships they create with and between their beneficiaries</td>
</tr>
<tr>
<td>Prosumption and co-production</td>
<td>Blurred boundary between producers and consumers</td>
</tr>
<tr>
<td>Open, collaborative and experimental</td>
<td>Production by the masses - large numbers of people working independently on collective projects without normal market structures and mechanisms</td>
</tr>
<tr>
<td>Better use of social assets</td>
<td>Recognition, exploitation and coordination of latent social assets</td>
</tr>
<tr>
<td>Development of capabilities and assets</td>
<td>Participatory approach enabling beneficiaries to meet needs over the longer term</td>
</tr>
<tr>
<td>Cross-sectoral</td>
<td>Occur at the interfaces between sectors and involve actors from across sectors</td>
</tr>
<tr>
<td>Bottom-up and connected initiatives</td>
<td>Distributed systems where innovations and initiatives are dispersed to the periphery and connected by networks</td>
</tr>
<tr>
<td>Mutualism</td>
<td>Notion that individual and collective well-being is obtainable only by mutual dependence</td>
</tr>
</tbody>
</table>

**Figure 3.3:** Based on Caulier-Grice et al. (2012)
Table 3.4: Cauiliar-Grice et al. (2012)

<table>
<thead>
<tr>
<th>Types of social innovation</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>New products</td>
<td>Assistive technologies developed for people with disabilities (e.g. voice synthesizers)</td>
</tr>
<tr>
<td>New services</td>
<td>Mobile banking (MPesa in Kenya)</td>
</tr>
<tr>
<td>New processes</td>
<td>Peer-to-peer collaboration and crowdsourcing</td>
</tr>
<tr>
<td>New markets</td>
<td>Fair Trade or time banking</td>
</tr>
<tr>
<td>New platforms</td>
<td>New legal or regulatory frameworks or platforms for care</td>
</tr>
<tr>
<td>New organisational forms</td>
<td>Community interest companies</td>
</tr>
<tr>
<td>New business models</td>
<td>Social franchising, or just in time models applied to social challenges</td>
</tr>
</tbody>
</table>

reasons provided are: social problems are stigmatising, are usually solved by the state or by no-profit organizations and lead to overlook the capacity of people of transforming idle resources in solutions. This choice seems a hazard as remove from the definition many innovations that have all the other characteristics and could be definitely identified as social. It also neglects, for example, the negative links that extreme poverty has with living with dignity, affording an education, etc.

In a last effort the authors of the report make also a list of what typologies of innovation they have found, pairing them with examples (figure 3.4). While one may not agree on the contents of the definition, this is one of the best examples on how a definition should be built.

After having fairly discussed the issues of defining social innovation, awareness should be spread about possible pitfalls about the concept (Hubert et al., 2010):

- social innovation should not intended to describe every action with some social dimension (this is exactly the problem that may occur with a definition that is too broad);

- social innovation should not be considered as a “privatization” of services usually provided by the state, because from one point is limited, from another is shortsighted and suggests the idea that the government should step aside;

- while many social innovations are bottom-up initiatives, the concept should not be confined to them, as they are only a part of a larger spectrum;

- while social innovation has the potential to help with the current problems of the society it should not be seen as a panacea for everything, nor measurement should be left only to success stories, both benefits and costs should be assessed in a proper and objective fashion.
3.1.2 Process

The “stage” view for describing the process of social innovation is used by many authors and one of the most famous and fairly detailed is the one developed by Murray et al. (2010) in figure 3.5. Let us examine more in depth each stage (Murray et al., 2010; Caulier-Grice et al., 2012).

1. Prompts

The first stage is about identifying and framing the problem. Every good problem solving process, in fact, starts with getting aware that there is a problem or, depending on the situation, a new or not adequately met social need. Then, it is time to explore the problem in depth, in order to understand it and reach the causes (act only on the effects of the problem, the “symptoms”, is not enough to solve it). So, only when it is clear what are the objectives, constraints and other features of the issue one may proceed to the next phase. What can be the alarm bell that makes the social innovator aware? It can be a sudden change in the external environment, like a natural disaster or a political crisis or even a subtler worsening of a long-standing crisis. It can stem from the work of academics or journalists, new evidence or research may give the right prompt, even more if diffused by media.Obviously, it should not be forgotten that an innovator may actively seek this
“prompts” and the techniques are many and used as well for non-social innovation.

2. **Proposals**
   This stage is about generating ideas, and there is not an unique process to do so. There are many tools that can be used, it can involve more or less stakeholders, can create something completely new or pick an adapt from another context, can be an open process.

3. **Prototypes**
   This stage is about testing and experimenting with prototypes, pilots, controlled experiments, simulations, etc. It is particularly important as social innovation tends to lack tested model from where it can draw and moves in a complex system with many stakeholders: the uncertainty that derives from these issues makes a trial-and-error phase essential.

4. **Sustaining**
   This stage is about creating a sustainable “business model” that can assure the long-term viability of the innovation. In many cases, the major issue is a financial one, a state has to find the budget, a venture enough funds to run, invest and grow. The financial aspect is not the only one, of course, for example a government will need also political and public support, a private initiative will need partners, human resources, scaling strategies, measurement and communication strategies, governance models, etc. So, sustainability goes beyond the financial dimension, although important, and “sustain”, that is uphold, the social objective, while trying to make it viable is another challenge.

5. **Scaling**
   There are many ways to scale the impact: expanding in another location, increasing the capacity or the range of services, making partnerships, doing social franchising, letting people free to imitate or even helping them by making available models and tools. There is no shortage of problems though, there are not many proven models that can be used to expand the impact and even when available they usually need to be adapted to the relevant context. Also, the struggle between financial and social dimension is real and even more problematic when there are investors with interests at stake. Sometimes, then, the problem is to find demand, or better, to convince people that they have a certain need, or in other terms: increase the awareness of the problem. Other times, it is about proving the effectiveness of the solution or
trying to change the perception about it or just waiting that long decision processes unwind.

6. **Systemic change**

Systemic change is the last stage of social innovation, or better, it is the ultimate objective to which every social innovation tends. Unfortunately, achieving it is the exact opposite of obvious. It requires changes in the whole society: the laws, the regulatory and fiscal frameworks, governance and business models, the skills and technologies needed, but even more attitudes and culture and user/consumer behavior, etc.

As an example of “systemic change” Caulier-Grice et al. (2012) offer the “Green movement”. The example is, indeed, fitting as it started small, with social movements and third sector organizations, then, also thanks to new proofs about man-made climate change, it grew: consumers became more demanding, business started feeling the pressure and the opportunities, new pieces of legislation were drawn. In 2015 the “Paris Agreement” was adopted and later signed by 195 parties in order to limit global warming (UNFCCC, 2015).

Regarding the “spiral” model, it is appropriate to spend a couple of words more: it is not a linear model, visually and practically, the stages may overlap, be made in different order and be affected by feedback loops, others may be skipped all-together, but it is useful to have a framework in order to have a general view of the usual growth of social innovation and to think about the “needs” of each stage (Caulier-Grice et al., 2012).

3.1.3 **Barriers**

Hubert et al. (2010) decide to face the “barriers discussion” through the types of problems encountered, while Caulier-Grice et al. (2012) prefer to look at them from the point of view of the actors involved, similarly does Mulgan et al. (2007), while describing the optimal environmental conditions for social innovation. In the following paragraphs, I will try to make a summary and some interpretations, in order to understand what are the most important hindrances to social innovation.

- **Finance**: finding money to sustain the activities is necessary, independently from who is initiating the innovation, but while for the public sector and the private sector it is more about finding a place in the budget, than an inherent scarcity of resources, for social enterprises and the third sector the matter may be more serious. Sources of funding, like banks or venture capitalists, tend to be wary as social innovation is coming from actors not usually linked with traditional innovation, has
problems regarding the measurement of the value created and the appropriation of the value itself, may have a high risk (like other innovations) and may be perceived as not sustainable (as it often seeks a double or triple bottom line). This makes the valuation of other social innovations even more difficult, because of the scarcity of data.

The inability to secure capital and the reliance on grant money or donations makes hard to adopt a long-term perspective with the consequence of not being able to scale the impact, grow or become more resilient;

- Governance: the actors in the field of social innovation tend to be fragmented, when looking both at the ties between actors of different sectors and at the ties with actors of the same sector. This lack of “mass” (considering it both as a single actor and network-wise) makes coordination, sharing best practices, policy coordination and lobbying difficult. To sum it up, with this kind of problems the effort is inefficient.

Looking at the private sector in more detail, it can be seen that mainstream companies are starting to see the social sector as an opportunity and social practice as a drive of value creation. The lack of institutionalized objective, though, means that commitments can waver. Instead, if hybrids, like social enterprises, are considered, the problem is another one: the social goal is, indeed, institutionalized, but the pressure of scaling while staying sustainable and loyal to the mission can be hard to bear and lead to a tilting toward the financial side. Focusing on the public sector, it can be seen that it is the most apt actor to deploy systemic change, it has large amount of resources: financial, human, organizational, etc.; it has a wide array of actions that it can take to foster change, like laws, and the means to enforce them. Unfortunately, it has also a silos structure, with poor communication and coordination and a lack of enough resources dedicated to coordinate on the matter. The bureaucratic processes and the accountability standards make taking action a long journey and acting on innovation a difficult one;

- Culture: the recognition of social innovation is lacking. From an academic point of view, as can be seen from the previous sections, there is no consensus. Focusing on official recognition, it mostly goes from none to partial, usually embedded in other concepts (like the Italian “startup innovativa a vocazione sociale”) and definitely not homogenous among different countries. This is also reflected in the community, where social is often linked solely to charities, public or third sector. In southern Europe, a strong informal solidarity system, “heavy” institutions and the habit of seeing the role of the citizen as passive, actually, make the diffusion of social innovation more difficult. The result is that social innovation is difficult to
be mainstreamed and data on it is somewhat lacking.

The government bodies have also a part of their culture that hinder social innovation: there is a low tolerance for failure, both in political and bureaucratic terms, and therefore a risk-adverse attitude; action is often driven by the aim of gaining the consensus of the public, therefore can easily waver and it is afflicted by the recognition problem; action is born from compromise that need to make space for different and maybe contradictory opinions, this make the process slow and less effective;

- Skills: there is not yet a precise set of skills needed for a social innovator, and, therefore, there is an important deficiency of courses that specifically teach them and, given the absence of a shared definition, it is hard to point to an ideal curriculum for a social innovator. This has the consequence of both a certain lack of legitimacy of the role of social innovator and a less than “optimal” number of them. This sector tends to have a lower attractiveness, because social enterprises and the likes tend to be small with few resources, therefore they cannot entice through high salaries, benefits, long-term hiring nor develop skills internally;

- Measurement: for this part I will just cite Hubert et al. (2010) that offer a brief, but meaningful, view and add that the point in which the well-being of people is measured not only by economic production and financial indicators is not yet completely reached.

“First of all, the real impact of social innovations is hard to evaluate in quantitative terms. Second, there seems to be an insufficient culture for ex-post evaluation in the operators involved in the implementation of projects related to social innovation. A generalised delay in the development of a social outcome evaluation infrastructure by the social sector with respect to corporations. This is usually based on anecdotal evidence or success stories” (Hubert et al., 2010, p. 110).
3.2 Business Incubators

3.2.1 Definition

Defining a business incubator may prove challenging, as almost every paper that treats about this definition does not fail to mention that there is no consensus about the aforementioned definition: “there is still no universally accepted definition of business incubation and incubator” (Theodorakopoulos et al., 2014, p. 3), “definitional ambiguity vis-a-vis the terms “business incubator” and “business incubation” plagues the literature” (Hackett and Dilts, 2004, p. 59), “a consensual definition for BIs [business incubators] is yet to be found” (Bruneel et al., 2012, p. 111), “the incubator concept has shown to be anything but clear in practice” (Bergek and Norrman, 2008, p. 5).

The reasons for this ambiguity are several (Hackett and Dilts, 2004):

- since their inception business incubators have evolved, changed, diversified (Voisey et al., 2006) and adapted to the context, and the term to define them, instead of being left referring to the original concept, has been “updated” and expanded in order to fit the most different situations (Hackett and Dilts, 2004; Theodorakopoulos et al., 2014);

- “business incubator” has been used in many instances as interchangeable with “research Park”, “technology Innovation Center” (Hackett and Dilts, 2004), but also, as reported by Theodorakopoulos et al. (2014) and Mian et al. (2016), “enterprise centres”, “seedbeds”, “science parks”, “technopole”, “industrial parks”, “innovation centres”, “knowledge parks”, “business accelerator”, “cold frames”, “hatcheries”, “hives”, “germinators”, “hubs”, “hot-desks”, “graduators”, “grow-on space”, “spokes”, “ideas labs”, “managed workspace”, “venture labs”, “business centres”, “fertilisators” and the “networked incubator”. For example, Grimaldi and Grandi (2005) describe “independent private incubators” as accelerators, while Pauwels et al. (2016) argue that they have specific features that separate them from incubation models. While others, like Bruneel et al. (2012) and Carayannis and Von Zedtwitz (2005), argue that sometimes business incubators, too concentrated on the renting business tend to act as landlords and therefore are more similar to science parks or even real estate parks;

- there are also “virtual incubators”, also called “incubators without walls” (Hackett and Dilts, 2004; Theodorakopoulos et al., 2014) that, while more or less with comparable objectives, do not offer a space, by many considered critical for incubators;

- “[there] is a persistent tendency to not define the incubation process, or, when de-
fined, to disagree on where and with whom the incubation process occurs” (Hackett and Dilts, 2004, p. 60); (Theodorakopoulos et al. (2014) express the same concept). It has been also referred as the “black box of business incubation” (Hackett and Dilts, 2008);

- the different lenses in which incubators and in general supporting tools for entrepreneurship have been studied may result in having too much difference for a generalized theory (Phan et al., 2005; Mian et al., 2016);

- incubation can be considered as a continuum (birth, growth, scale), but rarely a single unit support it all, this presents the problem of what to consider an incubator (Mian et al., 2016).

Now, I will proceed with an overview of some definitions and try to grasp the links between them. I will start with one rich in contents, then each subsequent definition will add another piece or point of view.

Let us start with Eshun Jr (2009, p. 156): “I define a business incubator as an environment formally designed to stimulate the growth and development of new and early stage firms by improving their opportunities for the acquisition of resources aimed at facilitating the development and commercialization of new products, new technologies and new business models”.

“Environment” and “formally designed” give the idea that the business incubator is something bigger than an organization, but, at the same time, driven by a precise scope. Business incubation is, therefore, not made by closed and hard boundaries, but at the same time has a delimitation and not everything can be considered a business incubator. This is particularly important because as Phan et al. (2005, p. 168) notice: “there has been a recurring problem of definitions in which science parks and incubators can encompass almost anything from distinct organizations to amorphous regions”, while Bergek and Norrman (2008, p. 5) remark “there is disagreement with regards to whether an incubator is an organisation or a more general entrepreneurial environment”.

The view of the incubator as something bigger than a single organization is shared also by Hackett and Dilts (2004) that consider the business incubator as a network that includes the tenants, the incubator’s staff and board, universities, the local community, private firms, and service providers to whom incubators’ services may be outsourced, like lawyers, accountants, strategic consultants, marketing experts etc., but also investors and volunteers.

“Early stage firms” are the focus of the business incubator, on this point there is enough consensus (Giordano et al., 2015; Hackett and Dilts, 2004; Lall et al., 2014; Bergek and
Norrman, 2008). This, obviously, does not mean that there are not differences depending on the context (e.g. country or sector) and on how much “early” is considered “early stage”.

The last part of the definition is about helping and improving, but interestingly enough, there is no sign of things such as “services” (regarding the things that can be developed) and “survival” or other terms that recall the hardships that a new firm, even more if innovative in some way, has to face.

For Hackett and Dilts (2004, p. 57) “a business incubator is a shared office space facility that seeks to provide its incubatees (i.e. “portfolio” or “client” or “tenant-companies”) with a strategic, value-adding intervention system (i.e. business incubation) of monitoring and business assistance. This system controls and links resources with the objective of facilitating the successful new venture development of the incubatees while simultaneously containing the cost of their potential failure”.

The incubator is described based on what it offers and what are its objectives. This format for the definition is quite common in literature and tends to give a clearer idea on what is, in practical terms, an incubator. It depends also on the level of abstraction that is used in the definition itself to describe the services and the goals, this more often than not leads to a wider or narrower definition. In particular, here, it is possible to see that both the described offer and the objectives are put down at a quite high level favoring a wider definition. In contrast, it is also specified the importance of the space in the offer of an incubator. It is clear that the authors reject the idea of considering virtual incubators as incubators. The objectives specified here are the ones referred to the direct outcomes of the incubator’s activities (i.e. generating successful ventures). Wider scopes, like economic growth, social impact or profit, are not cited. Of particular interest, there is the last sentence about the containment of the cost of failure. While talking about incubators the idea of “helping” failing the right way is rarely considered, actually, not often the “failure” aspect is treated at all. It is important to shine a light on it, because not only an incubator should help a business grow, but should also make sure that a failure does not turn in catastrophe and not to be just a life-support for firms that are not going to be able to survive. It would be interesting to test if this “philosophy” can explain why in some studies firms in incubators have a lower survival rate than firms out of the incubator.

Along similar lines there is Barbero et al. (2012): “an incubator is an entity which provides small businesses with resources that improve their chances of foundation and survival. The objective of the incubator is to improve the probability of survival of the firms supported and accelerate their development”. Again, there is a resources-objectives format, but the
definition is far broader, while that was intended by the author, it seems that the definition can be applied to every organization that helps small businesses in any way (it is worth noticing the use of “small” instead of “new” or the likes that ends up encompassing also businesses that have no intention to grow). Extracting a concept from Casasnovas and Bruno (2013): the problem with inclusive definitions is that suddenly the object of the definition can be found everywhere.

Theodorakopoulos et al. (2014, p. 2) present a more detailed definition: “in essence, the concept of business incubation refers to a concerted, systematic effort to nurture new firms in the early-stage of their activity in a controlled environment. As a dynamic process, it offers a combination of infrastructure, development-support processes and expertise needed to safeguard against failure and steer incubatee firms into a growth path”.

The first thing that can be noticed is that here the focus is the process of business incubation, but is generally safe to assume that a business incubator should “enact” a business incubation process.

Moving the focus on other parts, first, there is the “controlled environment” that suggests that a business incubation process “shelters” the newly formed firms from, at least some of, the hardships of the external world.

Second, “dynamic process”: business incubation should be tailored to the object of incubation and cannot be expected that two of them are exactly the same or that the needs of a firm do not evolve over time.

Third, “infrastructure”: while this can be seen as a clearly reminder to the space dimension of the offer of a business incubator, the term is not exclusively linked to physical assets.

Except what just mentioned, the elements of the definition are the ones already seen: the resources-objectives format, the effort driven by a specific will (“concerted, systematic”) toward early-stage firms in order to increase survival chances (“safeguard against failure”) and foster growth.

In the next definition, it is possible to see how the authors lean heavily on a particular objective of incubation that is powerfully felt, especially in Europe.

The business incubator is a support structure to the starting phase of new entrepreneurial initiatives, particularly useful in the areas where the so called BICs (Business Innovation Centres) or CISIs (Centres for the innovation and enterprise development) operate, where the creation of new firms is felt as a way to foster the economic development of the territory (Carrera et al., 2008). Leaving out comment about the broadness of the definition or the focus on new firms, what is interesting is how the usefulness of incubators is mainly ascribed to economic development and how the link with other structures is felt as im-
important (also in Colombo and Delmastro (2002)). This makes sense: if an organization sets out to help local economic development, it is understandable that it wants to have or have links with an organization that nurture new firms. There are, also, opportunities like cross-subsidizing the incubator with others more stable revenues sources or creating partnerships or sharing between new firms and more established tenants.

In the realm of broad definitions, at various level there are: “we define these institutions as property-based organizations with identifiable administrative centers focused on the mission of business acceleration through knowledge agglomeration and resource sharing” (Phan et al., 2005, p. 167). While it may not reach the specificity of longer definitions, it remains in the middle between broad and specific: “property-based” spells “space”, “identifiable administrative centers” means that one organization should lead or be the main coordinator, “business acceleration” implies that the objective is to foster a faster than normal growth, discarding, therefore, mere survival, “resource sharing” points to the shared office resources and to the networks, while “knowledge agglomeration” to organizational learning (Hackett and Dilts, 2004) and spill-overs.

“BIs are property based initiatives providing their tenants with a mix of services encompassing infrastructure, business support services and networking” (Bruneel et al., 2012, p. 111). This one both recalls Phan et al. (2005) and Apa et al. (2017, p. 4): “we agree in identifying four components that well define business incubators: a) shared office space, which is rented to tenants under more or less favourable conditions, b) a pool of shared support services to reduce overhead costs, c) professional business support or advice (“coaching”) and d) network provision, internal and/or external to the incubator”.

The definition of a business incubator through its services is another option to outline the phenomenon, it is not a flexible one as the services may expand or transform depending on changing needs, making the definition outdated rather fast.

Incubators belong to the wider scope of the initiatives meant to stimulate and support the entrepreneurship that try to combine technology, capital, professionalism and entrepreneurial experience in order to accelerate the formation and the development of new firms (Auricchio et al., 2014).

While broad definitions have the problems outlined before, it should also be kept in mind that an exceedingly precise labeling creates more confusion and limits understanding, instead of helping it (Mulgan et al., 2007).

A review of definitions would not be complete without giving space to what the institutions say about it.

Looking at the Italian legislation, it is possible to find a definition in the section 25, paragraph 5 of legislative decree number 179 of the eighteenth of October 2012, later
modified with the law number 221 of the seventeenth of December 2012 (Italian Government, 2012):

“Ai fini del presente decreto, l’incubatore di start-up innovative certificato, di seguito: “incubatore certificato” è una società di capitali, costituita anche in forma cooperativa, di diritto italiano ovvero una Societas Europaea, residente in Italia ai sensi dell’articolo 73 del decreto del Presidente della Repubblica 22 dicembre 1986, n. 917, che offre servizi per sostenere la nascita e lo sviluppo di start-up innovative ed è in possesso dei seguenti requisiti:

- dispone di strutture, anche immobiliari, adeguate ad accogliere start-up innovative, quali spazi riservati per poter installare attrezzature di prova, test, verifica o ricerca;

- dispone di attrezzature adeguate all’attività delle start-up innovative, quali sistemi di accesso in banda ultralarga alla rete internet, sale riunioni, macchinari per test, prove o prototipi;

- è amministrato o diretto da persone di riconosciuta competenza in materia di imprese e innovazione e ha a disposizione una struttura tecnica e di consulenza manageriale permanente;

- ha regolari rapporti di collaborazione con università, centri di ricerca, istituzioni pubbliche e partner finanziari che svolgono attività e progetti collegati a start-up innovative;

- ha adeguata e comprovata esperienza nell’attività di sostegno a start-up innovative.[...]

For the Italian law, a “certified incubator” is a firm that may have different legal forms with the objective of supporting startups, but must have some pre-requisites. In particular, adequate space is mentioned together with some physical assets like shared office and research resources, the latter are not always mentioned in literature. It must be directed by people with proved experience in entrepreneurship and innovation, and have a permanent structure of technical and managerial assistance. It must also have proved experience in supporting startups. Until here, there is not anything that has not been already cited, except that in order to get a certification the incubator should, at least in theory, be good at its job. The requisite of having a regular relationship with universities, research centres, public institutions and financial partners that promote projects linked to innovative startups is partly new. In fact, in other words it means that having a strong network composed by representatives of all relevant actors in the field is a requirement.
Regarding the definition provided by the European Commission in the study “Benchmarking of business incubators” (Centre for Strategy & Evaluation Services, 2002, p. 9): “A business incubator is an organisation that accelerates and systematises the process of creating successful enterprises by providing them with a comprehensive and integrated range of support, including: incubator space, business support services, and clustering and networking opportunities.

By providing their clients with services on a “one-stop-shop” basis and enabling overheads to be reduced by sharing costs, business incubators significantly improve the survival and growth prospects of new start-ups.

A successful business incubator will generate a steady flow of new businesses with above average job and wealth creation potential. Differences in stakeholder objectives for incubators, admission and exit criteria, the knowledge intensity of projects, and the precise configuration of facilities and services, will distinguish one type of business incubator from another”.

First, it should be highlighted that this is not the official position of the European Commission (the European Commission sometimes assigns studies to third parties; these studies, while ordered and used by the Commission, are not officially considered its position), but it is nonetheless interesting.

The first part of the definition is about a well-defined organization with a precise will that means to create successful firms through the offering of support of various nature, that is not anything that has not been already tackled before.

The second part starts drifting away from the main purpose of a definition, and describes how the incubator is meant to increase success chances of young firms: it is mostly about lowering the costs through shared resources and offering all the support that is needed in one place, without any hassle.

The third part strays even farther away and tries to define in short what success looks like for an incubator and what can be a way to differentiate between typologies of incubators.

While this kind of definition may help in giving a quick idea on what a business incubator is about, it leaves out too much to be really considered.

Not having consensus on the definition leads to some problems:

- it is difficult to put order in the corpus of research, compare studies or proceed in the same direction;
- it is hard for the public to have a clear understanding, this means that the concept does not penetrate in the culture and loses credibility. From a more institutional point of view, legislat ing becomes a challenge, even harder if comparable policies want to be reached across the continent;
• a very practical issue is that, without one definition, gathering data and estimating the size of the phenomenon is problematic (Hackett and Dilts, 2004; Phan et al., 2005; Ahmad and Ingle, 2013; Lalkaka, 2002).

3.2.2 Typologies

The first relevant contribution to the topic that I want to cite is the one of Aernoudt (2004). Before presenting his typologies, he makes two remarks: first, that business incubator is an “umbrella word” and it is becoming increasingly so. The reason behind this comment is that the word is used to describe heterogeneous organizations with objectives that differ completely from one another. Second, the types of incubators that he finds stem from the different ways in which the business incubator has been considered through history.

The categorization mainly focuses on the objective of incubators. Therefore, the “economic development incubators” can be found that try to increase the competitiveness and the social and economic status of a region in order to bring it up to speed and have cohesive areas. The main objective is clearly regional development, the secondary one is business creation that creates employment and wealth and in a loop, increases the development of the region. This kind of incubator has not a particular focus on a sector.

The first objective is probably one of the oldest and more popular: the first incubators were born to recover depressed areas where large factories closed down (Carrera et al., 2008; Hackett and Dilts, 2004; Mian et al., 2016), the business incubator is also recognized as a tool for social and economic development both at academic and institutional level (Van Weele et al., 2016; Hackett and Dilts, 2004; Auricchio et al., 2014; Grimaldi and Grandi, 2005; Mian et al., 2016), most of the present incubators has also that objective or at very least is aware of the effect their activities have on the local territory (Hackett and Dilts, 2004; Auricchio et al., 2014; Von Zedtwitz and Grimaldi, 2006; Aernoudt, 2004). Another type of incubator is the “technology incubator” that deals with an “entrepreneurial gap”. This means that it tries to foster entrepreneurship and stimulate innovation and new technologies creation and exploitation. It, obviously, focuses on technologies like IT and biotechnology.

Another typology of particular interest is the “social incubator” that deals with a “social gap”. The objective is employment creation, or better the creation of employment for some disadvantaged social categories and therefore promotion of the integration of the aforementioned in the society, transforming what in many cases is a cost for the State and the society in a productive resource. It is interesting to notice that “social” is considered in a narrow sense, encompassing only the integration spectrum and leaving out all the
facets that recently can be seen in a clear way in the field of social enterprises.

The “basic research incubator” has the objective of closing the “discovery gap”, in other words, the market failure that happens when startups deal with uncertain innovations and cannot find the funds due to the inherent risk of uncertainty (Phan et al., 2005).

Their focus is, therefore, to help research in “blue-sky” areas and “moon-shot” projects and then create spin-offs and commercialize the results.

The last typology is the “mixed incubator” that, as the name suggests, is a combination of the others: largely unfocused, its main objective is to help create all kinds of business.

A summary can be found in figure 3.6.

In the same paper, Aernoudt (2004) states that there is a connection between macro-regions and incubators’ traits, as the culture of a country influence the approach of the incubator. He identifies three macro-areas: Anglo-Saxon, German and Latin and takes as representatives UK and Finland for the first, Germany and Austria for the second, France and Italy for the third.

Dividing business incubators in different generations is a common way to distinguish them (Battistella et al., 2017; Pauwels et al., 2016; Mian et al., 2016). For this particular case, I will cite Bruneel et al. (2012).

The first generation incubators became widespread during the 1980s and were mostly focused on providing affordable space and shared resources (usually office resources, but sometimes also research equipment and laboratories). The largest benefits of this kind of incubator are reduced financial costs, thanks to the cheaper space and the sharing of resources that allows benefiting from economies of scale and dividing overheads between the tenants; having available resources that would otherwise be out of reach at an early development stage due to financial constraints; and, finally, eliminating the burden of planning and managing those services, for a startup time is a scarce resource and for first time entrepreneurs may as well be an unknown and stressing matter.

<table>
<thead>
<tr>
<th>Type of incubator</th>
<th>Gap considered</th>
<th>Main objective</th>
<th>Secondary objective</th>
<th>Sector focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic development incubator</td>
<td>Regional or local disparity gap</td>
<td>Regional development</td>
<td>Business creation</td>
<td>Unfocused</td>
</tr>
<tr>
<td>Technology incubator</td>
<td>Entrepreneurial gap</td>
<td>Create entrepreneurship</td>
<td>Stimulate innovation</td>
<td>Technology</td>
</tr>
<tr>
<td>Social incubator</td>
<td>Social gap</td>
<td>Integration of social categories</td>
<td>Employment creation</td>
<td>Non-profit</td>
</tr>
<tr>
<td>Basic research incubator</td>
<td>Discovery gap</td>
<td>Blue-sky research</td>
<td>Spin-off</td>
<td>High tech</td>
</tr>
<tr>
<td>Mixed incubator</td>
<td>Business gap</td>
<td>Create new businesses</td>
<td>Employment creation</td>
<td>Unfocused</td>
</tr>
</tbody>
</table>

**Figure 3.6:** Based on Aernoudt (2004)
During the 1980s and the 1990s, times of increasing unemployment in some of the mainstream sectors, innovation and technology became more and more the answer for revitalizing and re-targeting the economy. The needs of the new nascent firms were somewhat different: while the technological background was usually strong, the business and managerial one not so much. Bruneel et al. (2012) cite also a lack of routines (i.e. forms, rules, procedures, etc. around which a firm is built and through which operates) and difficulties in hiring the necessary talents, due to the small times and resources that can be dedicated in overcoming the imperfect information that characterize the job market. This led the business incubators to expand their offer through knowledge-based services such as training or mentorship (as known as “coaching”, described by Bruneel et al. (2012, p. 112) as “one-to-one support initiatives geared to accelerate tenants’ learning and skill development processes, generally involving tenant firms being assigned coaches or mentors either for a fee or free of charge”). The sought effect is to accelerate the climbing of the learning curve and avoid, in the ideal case, all mistakes.

During the 1990s the focus moved from the inside of the incubator to the outside. Offering preferential ways to get specialized help, contacts with partners and investors or even customers was the way to “provide” services that were more and more and increasingly specialized. Networks, therefore, eased the access to critical resources, but also opened up to new opportunities both in term of learning, of creating partnerships and a personal network of contacts, with the real possibility of building up a respectable image in a shorter time (legitimacy).

To sum it up, this division is based on the services offered and it is linked to the evolution of the needs of the tenants through the time.

Bruneel et al. (2012), also, offer a quantitative research in order to understand if the division in generations is applicable. The result is that the three generations do not differ much in terms of “official” offer (infrastructures, services, network). This means that business incubators of previous generations expanded their offer. Grimaldi and Grandi (2005, p. 118) notice that “many traditional incubators are also trying to revamp themselves and are increasing the number and the quality of services required by their potential incubatees although at a slower pace than the other actors”. Auricchio et al. (2014) point out other problems regarding that: sometimes the stated activities are really different from the ones that are actually carried out, other times they offer services for which they do not have enough competences or are just not completely aware of the services that are actually useful for their tenants (regarding the latter, the comment of Hackett and Dilts (2004, p. 62) should be noticed: “a comprehensive menu of support services must be developed in order to be able to properly incubate the incubatees. Developing and
offering a set of services, even if they are underutilized, may be significant, as the availability of the services may induce self-reflexive consideration on the part of incubatees as to what is required for their new venture to develop”). Evidently, this does not help a clear understanding of the issue.

What Bruneel et al. (2012) found different was the tenants’ profile: while there was not a great difference in the use of infrastructure, it can be noticed that the tenants of third generation incubators use more intensively business support, training services and access to network. They tended, also, to be younger (firms with less than one year), while tenants of first generation incubators had an average age of two years (usually entered young, but showing low ambitions) and the ones of second generation incubators of seven years (usually entered older, but with greater growth ambition). Moreover, third generation incubators’ tenants tended to have serial entrepreneurs in their teams.

Basically, Bruneel et al. (2012) conclude, the profile of tenants seemed to be very different and, in addition, only third generation incubators seemed to actually help firms grow and become more competitive and are also the ones for which sustainability seems a difficult achievement.

Therefore, the conclusion could be that: or the quality of the services was different or that the expansion of services did not come with an update of the other practices (e.g. selection criteria), that led to have services not particularly relevant to their tenants. This may depend on the fact that they have to answer to shareholders and, therefore, comply with their view (depending on the specific case, it may be also very political and poorly practical). Others may have had the problem of not having external support or have it no more and therefore had to secure a stable revenue (for example with mature tenants).

Another interesting way of classifying incubators is through the elements of competitive scope, plus another variable: profit or non-profit (Carayannis and Von Zedtwitz, 2005; Von Zedtwitz and Grimaldi, 2006). The scopes considered (Carayannis and Von Zedtwitz, 2005):

- vertical scope refers to the position they have in the “pipeline”, they usually focus on early-stage startups, before venture capitalists;

- segment scope concentrates on the “origin” of the tenants, some incubators may prefer students, like university incubators, others may favor their own employees, like company internal incubators;

- geographical scope refers to the choice of a particular geographical area, some may be global, others focused on a particular region;
industry focus, business incubators may concentrate on a specific industrial sector, on more than one, or, also, be unfocused.

These dimensions help to differentiate incubators between themselves, but also from other actors in the same “business” that is supporting new ventures.

The archetypes found by Carayannis and Von Zedtwitz (2005):

- regional business incubators are usually non-profit and focused on a specific geographical area and have the goal of local social and economic development;
- university incubators are usually non-profit and tend to prefer a particular segment of tenants that is their own students and are more interested in creating and commercializing innovation;
- independent commercial incubators are usually for profit and focused on specific sectors;
- company-internal incubators are usually for profit and bring forth the interest of the parent company in different ways;
- virtual incubators are usually for profit and they do not usually have a geographical scope.

The following figure, 3.7, gives the position of the different archetypes in terms of competitive scope and strategic objective in a glance.

The authors add, also, some interesting comments. While the objective of non-profit incubators is obviously not the profit, this does not mean that in the long-term objectives are not also economic, the benefits are just reaped by others, like the sponsoring organization, and the real contribution of the incubator may be hard to measure. The authors notice that financial self-sustainability is a rather new topic for non-profit incubators. Von Zedtwitz and Grimaldi (2006) provide evidence that this categorization is valid in Italy.

The continuous model is the one explained by Grimaldi and Grandi (2005) and is related to the evolution of business incubators explained before. The model can be described as a line segment where at each extreme there is an archetype and in the middle a continuous of incubator typologies.

At one end, there are “regional public incubators”, or as intended by the authors BICs (Business Innovation Centers), they are publicly funded incubators with the goal of regional development that provide mainly tangible assets and market commodities, while they usually do not have access to advanced skills or knowledge (technological know-how,
economic skills, etc), nor investment capital.

On the other end, there is the “independent private incubator” that provides more high-value and intangible assets and is more focused on profit. They give a lot of importance to networking and are usually more involved with the tenants. In the middle there are, for example, “university incubators”, that, while dependent on the university and on public funds, have access to advanced skill and knowledge, have, obviously, ties with the university, but have not as focus the gathering of capitals or the reduction of time to market. The authors add to the model, some “characterizing” variables (Grimaldi and Grandi, 2005, p. 115) that help bringing out the differences between the typologies of incubators.

- “Institutional mission/strategy”: this can be linked mostly to the “strategic objectives” seen in the previous model that are profit and non-profit. In addition, there are specific objectives for each incubator that are not necessarily the same of the ones of the archetypes.

- “Industrial sector”: it is related to the “industry focus” of the previous model. Usually a narrow industry focus is considered to be beneficial for the synergies that can be created among the tenants and for the better services that the incubator can generally offer, thanks to a specialization (e.g. in the specific technical field or as expertise for that particular competitive environment, etc.).
“Location”: this can be linked to the “geographical scope” of the previous model. The reasons to concentrate in an area are not only development of the economy, like in the regional incubators, but also proximity to universities or other centers of knowledge production, to industrial clusters, etc.

“Market”: it refers to the decision of helping companies that operate only locally or, instead nationally and internationally. This choice has evident repercussions on the needs that the incubator will have to satisfy.

“Origin of ideas”: it refers to the “sector scope” of the previous model. The authors describe incubators that prefer tenants coming from affiliated organizations (as company internal incubators and university incubators) as “inward-oriented”, while the others (as BICs and independent private incubators) as “outward-oriented”.

“Phase of intervention”: it refers mostly to the “vertical scope” of the previous model that is about the phase of the business development cycle in which the incubator intervenes.

“Incubation period”: it refers on how much time a tenant can stay in the incubator; this choice depends on many variables, like the business model of the incubator, the vertical scope, the market targeted, etc.

“Sources of revenue”: it refers to what is their financial structure, or in other words from where they get the funds to operate.

“Services offered”: it is fairly self-explicative.

“Management teams”: the authors support the idea that the main difference can be explained through the differences in the incentive structure, if a manager has a stake in the tenants of the incubators, he or she will be more motivated in getting involved in the management of the tenants’ firm.

It can clearly be seen that this model builds on the concepts expressed in the previous model and adds more, very practical, distinctions. It also supports the idea that there is an abundance of incubators typologies and, therefore, the idea expressed before about the heterogeneity of incubators. Taking a look at the number of characterizing variables, and making the assumption that not all are dependent on each other, the model can be hardly described as a simple line. A better visual description would be a set of lines representing the attributes and a “track” that cuts through them representing the particular typology. See the figure 3.8 for a visualization of the concept.

The last model I will review is the one of Barbero et al. (2012). The authors make two
Figure 3.8: Based on Grimaldi and Grandi (2005)
interesting statements: the model that they present is applied to Spain, but, following the example of Aernoudt (2004), they say that it could be applied also to other southern Europe countries, like Italy; they also claim that a consensus, regarding typologies, has been reached in literature and that their model can be a summary. The latter claim can be agreeable, if consensus is considered in a broad way. A handy summary of the typologies that the authors present is shown in figure 3.9, as can be easily seen I have already treated most of the topics and that gives some legitimacy to the claim of the authors.

### 3.2.3 Services

Many authors write about what services incubators offer, if some incubators consistently offer different services than others or if there are some variables that lead to the provision of different services, and this topic is rich enough without considering the issue of the evaluation of the quality of the services, already mentioned in another section. In order

<table>
<thead>
<tr>
<th>Types of Incubator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic research incubator</td>
<td>Links incubation with fundamental research;</td>
</tr>
<tr>
<td></td>
<td>Promotes the generation of technology ventures in strategic sectors;</td>
</tr>
<tr>
<td></td>
<td>Access to specific sector resources;</td>
</tr>
<tr>
<td></td>
<td>Technologies developed take the form of IP to be licensed by commercial</td>
</tr>
<tr>
<td></td>
<td>partners or exercised by spin off companies.</td>
</tr>
<tr>
<td>University business incubator</td>
<td>Mixed (public/private) nature;</td>
</tr>
<tr>
<td></td>
<td>Incubatees use extensively non-financial resources part of the university’s</td>
</tr>
<tr>
<td></td>
<td>infrastructure in the form of tangible and intangible assets;</td>
</tr>
<tr>
<td></td>
<td>Does not necessarily have a technology focus.</td>
</tr>
<tr>
<td>Economic development incubator</td>
<td>Publicly funded entities;</td>
</tr>
<tr>
<td></td>
<td>Purpose is the dynamization of the economic development of the area</td>
</tr>
<tr>
<td></td>
<td>through incubation of SMEs;</td>
</tr>
<tr>
<td></td>
<td>Mainly provides physical rather than intangible assets.</td>
</tr>
<tr>
<td>Private incubator</td>
<td>Private and corporate nature;</td>
</tr>
<tr>
<td></td>
<td>Purpose is to adopt a professionally organized knowledge flow to obtain</td>
</tr>
<tr>
<td></td>
<td>profits from venture management;</td>
</tr>
<tr>
<td></td>
<td>Contribution of capital and high value intangible assets (managerial talent</td>
</tr>
<tr>
<td></td>
<td>and QSEs [Qualified Scientists and Engineers], external partners, etc.).</td>
</tr>
</tbody>
</table>
to make this section easier to connect with, I will start with something linked to what I have already tackled: how different “generations” of incubators offer different services, or better, how initially they offered different services. In order to do this, I will show the work of Theodorakopoulos et al. (2014), based, among others, on Bruneel et al. (2012). As can be seen in figure 3.10 the author decided to define the generation in slightly different periods of time, this should not come as a surprise as the evolution of incubators can be seen as a slow one, without “jumps” or breaking points, and therefore different authors may not interpret it in the same way. This fact reflects, also, on the services highlighted. What is important is that the time-span remains the same and the trend of increasing high-value intangible knowledge services follows suit.

Considering incubators at present time, more in general, Von Zedtwitz and Grimaldi (2006) claim that some services are frequently cited in the literature and can be divided into some categories: physical infrastructures, office support, access to capital, process support, networking. Even more interestingly, the authors notice that these services are not offered only by incubators, but also by other players, therefore, they argue that an incubator, to be considered as such, should offer services of at least four out of five categories. They take in account the idea that different incubators offer different services (also Carayannis and Von Zedtwitz (2005)).

In figure 3.11, examples of the services in each category and of the possible competitors in the provision of the service are listed.
Lalkaka (2002), while with different names supports this categorization, but, like others, prefers to merge in one category (“infrastructure support”) the physical infrastructures and the office services. Without the use of categories, other authors cite the same services (Auricchio et al., 2014; Grimaldi and Grandi, 2005).

Carayannis and Von Zedtwitz (2005, p. 104-105) express the same concept, after all they share one of the authors. Leaving out minor differences, I would like to point out three things:

- first, they call the categories “defining services” that implies a stronger position regarding their presence in an incubator’s offer;

- secondly, they call the “process support” in another way that is “entrepreneurial start-up support”, while referring to the same category the different name wants to put the accent on the problems of the early-stage ventures, highlighting their entrepreneurial and innovative component;

- finally, they make a stronger claim saying that the incubator that offers all five categories of services can be considered an incubator in the strong sense of the term, with four categories in the weak sense, while with less it cannot be considered an incubators, but rather a specialized services providers (interestingly enough they considered accelerators one of such providers, supporting, therefore, the ones who claim that accelerators are something completely separated from incubators, like Pauwels et al. (2016)).

Along the same lines, Aernoudt (2004, p. 1) states what a “true incubator” should offer: “a true incubator therefore is not only office space with a shared secretary and a common
fax machine. For, besides accommodation, an incubator should offer services such as hands-on management, access to finance (mainly through links with seed capital funds or business angels), legal advice, operational know-how and access to new markets”.

Although brief and not covering all the points of the previous authors, it is clear that they share a similar belief.

Other authors that find common components in the service offer of incubators in the literature are Bergek and Norrman (2008). Specifically, they find four groups of services (Bergek and Norrman, 2008, p. 5):

- shared office space, which is rented under more or less favourable conditions to incubatees;
- a pool of shared support services to reduce overhead costs;
- professional business support or advice (“coaching”) and
- network provision, internal and/or external.

It can be easily seen that their findings are similar to the ones of Von Zedtwitz and Grimaldi (2006), but they do not consider “access to finance” as a category worthy to be separate from the others or even not a point of consensus in the literature. Moreover, they add some considerations regarding these services: they think that business support activities are particularly important, or better, a defining feature of incubators. In addition, they believe that the co-location of tenants is not necessary to define an incubator, although an advantageous solution.

Supporting the categorization of the previous author, there is Schwartz (2013, p. 305) that, after extensive consultation of the literature, came up with similar ideas. He calls them the main “ingredients” or “elements” of incubation (figure 3.12).

Regarding the spaces, he intends them in a broad sense, not only offices, but also laboratories and small-scale production spaces. One concept around which he wants to be clear is that the space should be priced below market rate and the rental terms should be flexible in order to follow the expansion (or reduction) of the tenants.

In “shared services” are encompassed also facilities, so the group comprise of, for example, secretarial services, IT infrastructure, equipment. The author notices that it is particularly important for sectors that need expensive equipment to operate (hard to come by for an early-stage venture). Also Schwartz considers business assistance as fundamental for the services offer of the incubator. “Credibility” is the one that was not cited and refers to nothing else than to the legitimacy and reputation that being in a certain incubator gives (something that early-stage ventures usually do not have). The last element
is “networking” and is not different from other times it was discussed.

Moving a little away from categorization, there is Bergek and Norrman (2008) that include “business support” (together with infrastructure, mediation and selection) among the main components of an incubator model. Other than describing them in similar fashion as other authors, propose three characteristics that make services provision different depending on who delivers it. First, “quality”, considered as the relative value of the assistance provided (has been already mentioned), then “time intensity” that is how much time is devoted in activities revolving around the provision of the service, and finally “comprehensiveness” or the degree to which the support cover strategic and operative/administrative aspects.

Another interesting topic regarding the provision of services is the level of intervention of the incubator that is about the role of the latter. It can be stronger and more proactive or weaker and reactive (“laissez-faire”) (Bergek and Norrman, 2008; Van Weele et al., 2017). In the first approach, the business incubator’s management guides the incubatee with actions like periodic critical assessments, mandatory formation, setting of periodical objectives, introduction of expert elements in the team, etc. (Bergek and Norrman, 2008; Van Weele et al., 2017). The second approach is a “pull” one where tenants have only minimal services and ask when they need more, this tends to be the case of more mature incubatees (Bergek and Norrman, 2008; Van Weele et al., 2017).
Grimaldi and Grandi (2005) present, among other things, an extensive list of services that are university related that is a thing that has not been discussed, therefore is helpful to see what a strong link with a university can provide.

Typical services proper, almost, only of university incubators are:

- faculty consultants;
- preferential link between students and employers;
- use of the university’s reputation;
- library services;
- laboratories and equipment;
- mainframe computers and others high-power computational units;
- tap in research and development activities;
- technology transfer programs;
- education and training for employees;
- social activities related to the university.

After having treated the subject of services from a theoretical point of view, I will present a pair of studies with a decisively stronger quantitative flavor.

Fernández Fernández et al. (2015) using a sample of 255 incubators (worldwide) try to tie the incubator size (in terms of number of firms) and the ownership of the incubator to the services that they commonly provide.

The results in figure 3.13 (where the values higher than average have a border with a solid fill) suggest that medium sized incubators are the ones that more commonly provide the greatest number of services. The smaller ones seem to be more concentrated on facilities, business development, access to finance and networking, while larger ones have a relatively better provision of technology transfer and internationalization services. The results in figure 3.14 (where the values higher than average have a border with a solid fill) suggest that private incubators tend to offer less services, while both government and NGOs tend to offer more. Universities tend to have technology transfer as a strong point, NGOs have networking and internationalization.

Centre for Strategy & Evaluation Services (2002), after stating that the services mix depended in great part on the incubation model and on the objectives of the incubator’s sponsor, is interested in seeing which are the services that are usually kept “in-house”, and,
<table>
<thead>
<tr>
<th>Services provided</th>
<th>Incubator size (number of incubated firms)</th>
<th>1–5</th>
<th>6–10</th>
<th>11–15</th>
<th>16–20</th>
<th>21 and more</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>84.4%</td>
</tr>
<tr>
<td>Business development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>79.2%</td>
</tr>
<tr>
<td>Finance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>78.2%</td>
</tr>
<tr>
<td>Networking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>70.5%</td>
</tr>
<tr>
<td>Technology transfer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>57.1%</td>
</tr>
<tr>
<td>Internationalization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>49.9%</td>
</tr>
</tbody>
</table>

**Figure 3.13:** Based on Fernández Fernández et al. (2015, p. 790)

<table>
<thead>
<tr>
<th>Services provided</th>
<th>Ownership</th>
<th>Academy</th>
<th>Government</th>
<th>NGOs</th>
<th>Private</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities</td>
<td></td>
<td>73.8%</td>
<td>89.2%</td>
<td>78.9%</td>
<td>46.9%</td>
<td>72.2%</td>
</tr>
<tr>
<td>Business development</td>
<td></td>
<td>71.0%</td>
<td>77.0%</td>
<td>90.4%</td>
<td>50.8%</td>
<td>72.3%</td>
</tr>
<tr>
<td>Finance</td>
<td></td>
<td>62.6%</td>
<td>81.1%</td>
<td>78.1%</td>
<td>46.1%</td>
<td>67.0%</td>
</tr>
<tr>
<td>Networking</td>
<td></td>
<td>57.9%</td>
<td>67.6%</td>
<td>79.8%</td>
<td>43.8%</td>
<td>62.3%</td>
</tr>
<tr>
<td>Technology transfer</td>
<td></td>
<td>52.3%</td>
<td>52.7%</td>
<td>55.3%</td>
<td>32.8%</td>
<td>48.3%</td>
</tr>
<tr>
<td>Internationalization</td>
<td></td>
<td>34.6%</td>
<td>45.9%</td>
<td>58.8%</td>
<td>32.8%</td>
<td>43.0%</td>
</tr>
</tbody>
</table>

**Figure 3.14:** Based on Fernández Fernández et al. (2015, p. 791)
therefore, considered more “core”, and which are the ones more externalized. Figure 3.15 is based on the answers of 76 European incubators (multiple answers for each line were possible). In order to find the services that tend to be considered core and kept internal, I made a ratio between the “external” and “in house” percentage: lower the percentage more are the times that the service is exclusively provided internally. As can be seen, the service that is most often provided internally is “pre-incubation services”, followed by “networking”, “business planning” and “help with raising bank finance, grants, venture capital” all with high percentages of in-house provision.

There is, then, a group of services with relevant percentages of both in-house and external provision. Finally, the services that are most externalized are “help with exporting and/or partner search abroad”, “market research, sales and marketing”, “accounting, legal and other related services”. It would be interesting to know which services are not provided by all incubators, unfortunately the data do not help very much, nonetheless some under-provisioned services can be detected, in fact, if the sum of who provides services internally and externally does not reach the quantity of the total sample, it means that the service is surely not provided by everyone (even if it cannot be said to what extent, due to the possibility of answering more than once for every line):

- Mentors, board members and other senior advisers;
- Help with e-business and other aspects of ICT;
- Incubator venture capital fund, business angel network;
- Advice on recruitment of staff and personnel management;
- Help with exporting and/or partner search abroad;
- Accounting, legal and other related services.

Centre for Strategy & Evaluation Services (2002) adds that business support services, considered a key aspect of incubation, can be subdivided in four main categories:

1. entrepreneurship training;
2. business support services (e.g. business planning, advice on accessing capital, marketing, the identification of suitable business partners and general strategic advice, legal services, accounting and market research);
3. technology and innovation support (e.g. technology transfer programs, access to research centers or comparable internal resources);
4. financing start-ups and expansions.

To be noticed that physical space does not appear in figure 3.15, but is cited extensively in the document, also as important for networking and cross-fertilization of ideas (the authors note that there should be synergies between the tenants for this to happen). The authors mention also services to graduate tenants (“after-care”) and to other small businesses, they can be considered revenue not directly linked to incubation, and a source of diversification of the incubator’s income.

### 3.2.4 History

Generally speaking, there is consensus in defining as the first business incubator the Batavia Industrial Center opened in 1959 in the city of Batavia, in the west of the state of New York in the United States of America (Hackett and Dilts, 2004; Battistella et al., 2017; Carrera et al., 2008; Aernoudt, 2004). The center was born after a big corporation

<table>
<thead>
<tr>
<th>Types of Business Support Services</th>
<th>In house</th>
<th>External</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-incubation services</td>
<td>86.8%</td>
<td>19.7%</td>
<td>22.7%</td>
</tr>
<tr>
<td>Networking, e.g. with other entrepreneurs, customers</td>
<td>84.2%</td>
<td>31.6%</td>
<td>37.5%</td>
</tr>
<tr>
<td>Other services</td>
<td>10.5%</td>
<td>3.9%</td>
<td>37.5%</td>
</tr>
<tr>
<td>Business planning and forming a company</td>
<td>81.6%</td>
<td>32.9%</td>
<td>40.3%</td>
</tr>
<tr>
<td>Help with raising bank finance, grants, venture capital</td>
<td>89.5%</td>
<td>36.8%</td>
<td>41.2%</td>
</tr>
<tr>
<td>Mentors, board members and other senior advisers</td>
<td>50.0%</td>
<td>35.5%</td>
<td>71.1%</td>
</tr>
<tr>
<td>Advice on development of new products and services</td>
<td>56.6%</td>
<td>46.1%</td>
<td>81.4%</td>
</tr>
<tr>
<td>Help with e-business and other aspects of ICT</td>
<td>51.3%</td>
<td>46.1%</td>
<td>89.7%</td>
</tr>
<tr>
<td>Incubator venture capital fund, business angel network</td>
<td>40.8%</td>
<td>42.1%</td>
<td>103.2%</td>
</tr>
<tr>
<td>Advice on recruitment of staff and personnel manage</td>
<td>42.1%</td>
<td>46.1%</td>
<td>109.4%</td>
</tr>
<tr>
<td>Training to develop business skills</td>
<td>47.4%</td>
<td>61.8%</td>
<td>130.6%</td>
</tr>
<tr>
<td>Help with exporting and/or partner search abroad</td>
<td>36.8%</td>
<td>55.3%</td>
<td>150.0%</td>
</tr>
<tr>
<td>Market research, sales and marketing</td>
<td>40.8%</td>
<td>68.4%</td>
<td>167.7%</td>
</tr>
<tr>
<td>Accounting, legal and other related services</td>
<td>21.1%</td>
<td>75.0%</td>
<td>356.3%</td>
</tr>
</tbody>
</table>

**Figure 3.15:** Elaboration on Centre for Strategy & Evaluation Services (2002)
left the area and a large building with it, a local real estate developer, not being able to find someone that would occupy the whole space, decided to divide it in smaller spaces and rent them to individual tenants, whom sometimes asked for advice or business-related assistance (Hackett and Dilts, 2004).

Until 1980 the diffusion of business incubators was slow and mainly led by the government’s effort to curb the degradation of urban area and economy (Hackett and Dilts, 2004), but also some universities and research centers came into play (Hackett and Dilts, 2004; Carrera et al., 2008).

In the 1980s, business incubators became fully recognized entities (Theodorakopoulos et al., 2014) and had a significant diffusion, also thanks to three particular reasons reported by Hackett and Dilts (2004, p. 58):

- the passage of the Bayh-Dole Act in the U.S. Congress in 1980 decreased the uncertainty associated with commercializing the fruits of federally funded basic research;
- the U.S. legal system increasingly recognized the importance of innovation and intellectual property rights protection;
- profit opportunities derived from the commercialization of biomedical research expanded.

At the same time, research on business incubators spurred and in 1985 the National Business Incubation Association was formed, sign of an increased interest in the topic (Hackett and Dilts, 2004).

In the 1990s, the concept of business incubation captured great attention from the media that started to depict business incubators as innovation hatcheries, it was the time of the rising of the Dot-com bubble. When the bubble burst, for-profit business incubators centered on the internet fell, but the rest survived (Hackett and Dilts, 2004; Centre for Strategy & Evaluation Services, 2002).

It is rather easy to see how the history just laid down coincide or, at least, largely overlap what said in another section about the division of business incubators in “generations”.

About the history of business incubators in Europe, the information is less abundant. One of the first European business incubator was established in 1975 as a subsidiary of British Steel, called British Steel Industry. The objective was to create jobs in the areas of the United Kingdom that were affected by the closure of steel plants (Aernoudt, 2004).

Thanks also to the previously mentioned increasing interest in technology and innovation, in 1983 the University of Berlin found the first German incubator with the intent of facilitating technology transfers, France followed close-by in 1985 with a business incubator created within the Antipolis Technology Park (Aernoudt, 2004). Between the last two, in
1984, the European Union founded the European Business Innovation Network (EBN), a network of BICs (Business and Innovation Centres) that in the large part of cases offer incubation-like support (Aernoudt, 2004).

Looking instead to more recent policy work done by the European Union, there is the year 2004. The conference of the European Charter for Small Enterprises (ECSE) held in Dublin in that year can be considered the beginning of a new policy stream focused on supporting innovative and new small businesses (Ahmad and Ingle, 2013). The results of the conference became official policy in 2006 through the adoption of the communication: “Putting knowledge into practice: A broad-based innovation strategy for the EU”. Then augmented in 2007 with the adoption of “Lead Market Initiative for Europe”. In the same year, the EC launched the “Competitiveness and Innovation Framework Programme (2007-2013)”. The main rationale behind these policies was correcting market failures, specifically the low survivability of new firms and recommended support services such as business incubators (Ahmad and Ingle, 2013).

Additionally, some European Union’s institutions made studies that encompassed and offered evidence in favor of business incubators, for example the 2002 European Commission’s study “Benchmarking European Incubators”, the 2003 EU-wide green paper on “Entrepreneurship in Europe” and the 2009 EBN’s study “BIC observatory 2009: Facts and figures” (Ahmad and Ingle, 2013).

3.2.5 Why business incubators help

In this section, the level of analysis is the startup. In order to answer the question suggested by the title of the section, Carayannis and Von Zedtwitz (2005) say that entrepreneurs that found new start-ups have two main problems: on one hand, while certainly believing in their business idea, they do not know for sure if it will be successful, on the other hand, they do not have many resources (e.g. time and money) to ascertain it. So, in order to avoid problems like a too long time to market, smaller revenues or hiring the wrong employees, newly formed firms can go to business incubators that offer to accelerate the development of the business, shelter the firm from external disturbance and generally reducing the uncertainty and the mistakes, allowing the entrepreneurs to focus their attention on the core parts of their business.

A similar concept is introduced by both Hackett and Dilts (2004) and Bruneel et al. (2012), they talk about shortening or accelerating the “learning curve” and having “quicker solution” to problems or avoid the “trial and error” process typical of young and/or inexperienced enterprises.

Schwartz (2013) prefers to tackle the question in a related but different way, citing the
“liability of newness” (also Phan et al. (2005)) and “liability of smallness”. The idea is that early-stage ventures find themselves facing a relevant discrepancy between the resources that they need to be viable (e.g. stable business relationships, culture, routines, reputation and legitimacy) and the ones that they actually have. Apa et al. (2017, p. 1) describe the liability of newness as standing on four points:

- new organizations operate inefficiently as long as their workers do not learn their roles;
- organizational routines are not developed;
- new organizations must rely heavily on social ties among strangers, and the consequent lack of confidence translates into an additional source of organizational inefficiencies;
- the construction of a stable portfolio of customers takes some time, during which customer-producer ties are still very fragile.

The liability of smallness individuates size as an important element determining the liability of newness, but not enough to solve it if not present, therefore there is overlapping, but not a complete one. It is born from the lack of financial resources and support and managerial weaknesses (Apa et al., 2017). Auricchio et al. (2014) instead reach a similar conclusion, taking another road: market failures make difficult for the start-ups to obtain some critical resources for their development, for examples financial resources (due to asymmetry of information and adverse selection that plague financial markets, especially in case of higher uncertainty), knowledge, relationships and technology (often not available or developed).

### 3.2.6 Objectives

While in the previous section the level of analysis was the tenant firm, now is the level of the sponsoring institutions. Business incubators operate in many way and for different reasons, as Carrera et al. (2008) said: a business incubator is complex, because it can have various institutional natures, work on different sectors and offer a plethora of services, it is also chameleonic because it absorbs and reflects the values and the mission of the community and of the territory in which it is.

As mentioned previously one of the main goals of the institutions that sponsor and fund business incubators is the economic and social development of the region around the business incubator itself (Theodorakopoulos et al., 2014; Phan et al., 2005; Grimaldi and Grandi, 2005). Auricchio et al. (2014) explore better the concept defining the incubators as
a tool for the public intervention (also Theodorakopoulos et al. (2014); Phan et al. (2005), the latter considering it a “tool of political bargain”) used for pursuing the objectives of economic policy: at a macro level, to promote the economic development of an area, create jobs and increase the number of entrepreneurs (also Aernoudt (2004)).

Considering university business incubators, the most cited objective is technology transfer and spin-offs (Phan et al., 2005; Hackett and Dilts, 2004), while Hackett and Dilts (2004) cite incubating high-potential venture (for profit) as one of the common scopes of privately funded organizations.

While less tangible, and most probably not considered as the main objective of a business incubator, the “cultural” factor is cited in many works. Auricchio et al. (2014) talk about positive externalities, specifically stimuli to innovation and change to the technological paradigm. Aernoudt (2004) highlights the positive impact that business incubators have on the perception of the entrepreneurs and their role in creating an entrepreneurial culture. Lalkaka (2002) mentions instead a more general cultural change, together with the already seen stimulus to entrepreneurship.

Fernández Fernández et al. (2015), along their own consideration, offer the elaboration of some data. As can be seen in figure 3.16 the analysis level is the one of the incubator, that is in the middle ground between the sponsor organization and the tenant firm. Looking at the numbers, the totality of the sample tries to create successful enterprise, as expected, also increasing entrepreneurship awareness and create jobs score high, this well reflects what said before. “Income generation” and “export revenues” are less present, in fact, it can be supposed that they are more linked with private for-profit business incubators, the same can be said for “research commercialization”, referred usually to university, or basic research business incubators. “Policy impact”, instead can be a sign of the use of business incubators used as a policy tool. Fernández Fernández et al. (2015, p. 785-786), also, add that business incubators foster entrepreneurship and in so doing achieve objectives like “the promotion of the knowledge economy, the increase of human capital skills, the increase of employment and the improvement of public accounts [...] creating knowledge spillovers, increasing the number of enterprises; and increasing competition [...]diminish inequalities and create social cohesion by empowering people in risk of social exclusion and by meeting social problems not covered by the public institutions”. These considerations fall in the same line of the previous ones, but go deeper, helping to understand better, and in a more practical way, the matter at hand.
3.2.7 Selection

The selection procedure is an important topic for business incubators, for more than one reason: making a good choice when deciding who to bring in the incubator plays an important role on the success of the incubator (independently from the different objectives one may have), but I will talk about it in the appropriate section, together with the problems that selection generates regarding the evaluation of the performances; more often than not business incubators are considered as “selection agents” for players down the “pipeline” (Van Weele et al., 2016; Miller and Stacey, 2014), typically investors. Hackett and Dilts (2004, p. 62) say their own piece on the matter of selection, while not going in depth or examining in practice the selection process, the consideration surfaced is interesting, there are three types of applicants to an incubation process:

- those that cannot be helped through business incubation;
- those that should be incubated due to the existence of some resource gap(s) and
- those that do not need incubation.

While seemingly naive, it is important to keep present that the ideal candidates for incubation are the firms that are “weak-but-promising”, to use the words of the author, that is to say: the ones with a solid team and idea that lack some resources to succeed,

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Percentage of incubators pursuing them</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profitable enterprises</td>
<td>100.0%</td>
</tr>
<tr>
<td>Entrepreneurship awareness</td>
<td>99.6%</td>
</tr>
<tr>
<td>Job creation</td>
<td>92.1%</td>
</tr>
<tr>
<td>Income generation</td>
<td>66.7%</td>
</tr>
<tr>
<td>Research commercialization</td>
<td>63.1%</td>
</tr>
<tr>
<td>Policy impact</td>
<td>53.0%</td>
</tr>
<tr>
<td>Export revenues</td>
<td>47.7%</td>
</tr>
</tbody>
</table>

*Figure 3.16*: Based on Fernández Fernández et al. (2015, p. 785)
As mentioned before, selection is considered by Bergek and Norrman (2008) as one of the main components of incubation because it is foundation for the allocation of resources in an efficient and effective manner, considering both the incubator itself and the whole economy, in more general terms. Bruneel et al. (2012) notice that more heterogeneity means more services and therefore more resources and less efficiency.

Bergek and Norrman (2008) offer a general framework to understand the selection process that is built along two dimension: one is the focus of the selection, usually is the team or the idea (also Bank and Kanda (2016)), the other is about how strictly the criteria are applied, the authors describe two approaches called “picking-the-winners”, when the selection is strict and successful enterprise are “identified” ex-ante and “survival-of-the-fittest”, where the selection is less strict and the real skimming is done by the market itself.

Putting together the two dimensions, the authors recognize fours strategies, explained in figure 3.17. On the vertical axis there is the first dimension, on the horizontal axis the second one, in the quadrants it is described how the portfolio for each strategy could look like.

Bank and Kanda (2016), inspired by Bergek and Norrman (2008) and by the literature on the topic, conclude that the selection criteria depend on many factors like the incubator’s management’s preferences, the stakeholders and other characteristics of the business incubator. This conclusion is accompanied by a list (figure 3.18) of both the business incubator’s characteristic that may influence the selection criteria and the selection criteria themselves. The former is divided in “goal and agenda” (linked to the sponsoring institutions), “management” and “physical factors”, the latter in “idea” and “entrepreneur” as already seen.
Figure 3.17: Based on Bergek and Norrman (2008, p. 12-13)
3.3 Social Business Incubators

3.3.1 Definition

Before starting with this section, it is better to be clear on a couple of points: while social business incubators are not the same as traditional business incubators (the main topic of the similarly called section in this thesis), they are not something completely dissimilar. Looking just at the name, one could naively come to the conclusion that they are a subset of the ample family of business incubators, and she or he would not be wrong, matter of fact there is an extreme degree of overlapping, to the point that most of what there is in the section of business incubators would be applicable even in this section. Keeping this in mind, I will try to focus the attention on what is different and on comparisons, while keeping at minimum repetitions.

In order to reinforce the argument, it is better not to forget that social startups are still startups, and therefore share their problems (and have some more). Vinokur-Kaplan and Connor (1998), in a small empirical study on nonprofit incubators, found that they can mostly fall under the traditional business incubator definition. Giordano et al. (2015), most eloquently, apply traditional incubation elements (“selection”, “incubation”, “graduation”) to social business incubators.
Moving back to the definition itself, what are the additional problems with social business incubators? First, they are even younger, as both Casasnovas and Bruno (2013) in their forty incubators strong study and Miller and Stacey (2014) notice, most of social business incubators were born after 2008 and they are evolving, and it cannot be expected that there are a large quantity of studies, when the subject of those studies itself is somewhat lacking (Giordano et al., 2015). Secondly, they are very heterogeneous (Giordano et al., 2015), without a clear distinction between different support models (Lall et al., 2014); Wittmayer et al. (2015, p. 8), in their study on some Impact Hubs, write about them: “[a Impact Hub] combines elements from co-working spaces, innovation labs and business incubators” and Miller and Stacey (2014) notice that one organization can offer programs that span more than one incubation model.

The first definition I want to analyze is the one by Casasnovas and Bruno (2013, p. 180-181): “programs that support the scaling process of organizations that mainly target social challenges through innovative and market-oriented solutions. We differentiate these programs from other support institutions in that social incubators and accelerators offer a set of resources, not only a prize or award, and they usually work with cohorts rather than individual ventures. The resources offered often include training, mentoring, networking, or funding. We make no distinction as to the legal form of these support programs, they can be either for-profit or non-profit organizations, hybrid organizations, or belong to larger institutions such as universities, governments, or financial institutions”.

The first thing that strikes the attention is using the same definition for both social business incubators and accelerators, this should not come as a surprise in light of what have been said earlier, the authors, while making the distinction between incubators and accelerators, did find the proposed definition good for describing both (this also gives an explanation to the “usually work with cohorts”, generally reserved to accelerators alone).

As before the definition is centered around the resources-objectives format, the resources are no different from the ones already seen, the objective is to support the development of organizations that have the solving of a social challenge as the main target, have an innovative solution and trade on the market. This objective is, without doubt, acceptable:

- incubating organizations that are first and foremost social is a proper decision for an organization that is first and foremost social itself;
- requiring that there is some kind of innovation is reasonable, in fact, when talking about traditional incubators the theme of uncertainty and subsequent market failures has been addressed. Ideally speaking, no innovation whatsoever means that there is a tested business model and that a business incubator can only be marginally helpful;
• requiring market orientation is also reasonable as most of the services offered are useful only to businesses and the financial sustainability of the social business incubator depends, also, on the sustainability of the tenants.

While these requirements are sensible, it should also be clear that they are restrictive and may cut out some realities. Evidently the problem between a narrow or broad definition is present also here.

The clarification regarding the legal form is quite peculiar, but should not be surprising: in many cultures the “social aspect” is proper of NGOs and government, it is, therefore, understandable that the authors wanted to specify that that was not the case.

Moving on, Giordano et al. (2015) definition can be divided in three parts:

1. the evolution of the general contest of the third sector and the increasing leaning toward social entrepreneurship determined also the evolution and the development of incubators that started to “specialize” in social enterprises.

   With this first part, the authors state that social business incubators are nothing else than business incubators that decided to focus on a particular type of enterprises, because there was demand (the shift toward entrepreneurship of the third sector) or at least there was a potential demand. The two takeaways are therefore that social business incubators and traditional ones are not separate things (another evidence) and that they can be inserted in a wider systemic change;

2. the social business incubator is, therefore, considered as an instrument to support both the “startup” phase of new entrepreneurial initiative and the consolidation and development of the ones already existing through the provision of consultancy services, formation and instruments to understand better the area of operation (here Giordano et al. (2015) cite exactly Carrera et al. (2008, p. 14)).

   The social business incubator is envisioned by the authors as reference point for all social enterprises in the area. In this part, therefore, what are usually considered as “side” activities of incubators (like consultancy to mature firms and being a “beacon” for the community) are raised at the same level as the core incubation activity, outlining a powerful difference with its “cousin”, the traditional business incubator (regarding the Italian market the authors notice how rarely incubation is the core business of the organization as there is not enough demand of the services and programs are mostly financed by third parties, e.g. through fellowship: usually topic-locked competitions).
3. social incubators are organizations that promote and support entrepreneurial projects and initiatives with high social and environmental impact through the provision of a wide array of activities and services.

This part has the common resources-objectives format and has nothing that has not already been seen, except for a detail: “environmental impact”. While one can claim that “social impact” encompasses it, because environment has an intrinsic impact on the life of people, it is important to give relevance to it, because the topic itself is large and complex.

Carrera et al. (2008) give a lengthy definition complete of scope (at multiple levels), services offered and target incubatees:

A model type of incubator is a physical place, a multi-service organization that offers services and resources to accelerate and accompany the process of starting up an enterprise through: physical space, technological access, formation, empowerment of professional skills, networking skills to develop precious internal synergies, to increase the bargaining power toward the external market, on one hand, and, on the other, to reduce information asymmetries (regarding for example bureaucratic procedures, market research, regulation frameworks, etc.). To this, one can add external network in order to allow tenant firms to develop connections with institutions (public and private) of their reference market: the association with the incubator can give them credibility and visibility. Even more important is the target to which the social business incubator point to: cooperatives, social cooperatives, economically-relevant association (with market orientation), other non-profit organizations. Every social business incubator promotes and supports institutional forms and new economic sectors of activities that are coherent with the specificity of the reference area in which new professionals can emerge and legitimize themselves. In this sense the incubator can be identified as a policy instrument to contribute in the medium period to the processes of areas re-qualification.

The first half of the definition just reinforce the overlapping between social and traditional business incubators. The second half gives more interesting insights, like which organizations should be considered as incubatees: the authors seem to want to give a loose delimitation here, but the target appears to prefer organization more markedly toward the non-profit with market orientations (the law on innovative startups with a social vocation was not yet in being). The authors then proceed to link social business incubators to their territory: both to the activities that should be supported (relevant to the area and that can bloom in it) and to institutional action to revitalize the social and economic aspects of the area. This is a theme that was already present before (especially with regional economic development incubators) and will be present later, is evidently felt as
important in the literature. Finally, I wish to highlight how social incubators do not appear for the first time in this section, but were already mentioned before when writing about the typologies laid down by Aernoudt (2004). The target organizations were exclusively the ones that employed people with low employment capacity, a subset that would be considered rather narrow nowadays.

3.3.2 Typologies

Identify typologies in the realm of social incubation is not easy, the reason why can be easily extracted from what has already been said: social business incubators are mostly young, literature is scarce and often there is no clear definition between different incubators models. Nonetheless, I will present a couple of works that can be of interest. More than typologies, Giordano et al. (2015) present a framework that should help to classify and understand better phenomena of social business incubation. It revolves around three different macro-area of analysis: the identity of the incubator itself, its business model and how its incubation program is built. The first element has been operationalized in institutional profile that is legal form and sponsoring institution, mission of the incubator and background of the management team. Regarding the sponsoring institutions, it has been already noticed that different sponsors have different objectives that, therefore, influence the actions and the development of the incubator.

Why instead the legal form is important, even if a definition presented before makes no such difference. This is because the legal form does not “block” the organization from being an incubator, but it gives some interesting information: for example a hybrid solution that combines a profit and non-profit entity (e.g. a limited liability company and an association) gives flexibility in the trade business, but also enables the incubator to participate more easily in public tenders or receive donation (Giordano et al., 2015). A limited liability company may be a sign of a greater inclination to risk, because, as the name suggests, the liability faced by the entrepreneur is limited (Schwartz, 2013). The mission of the incubator defines its objectives, how it will reach them and more in general is an important part of how the incubator (but also other organizations) states its identity, it is, therefore, easy to understand why the authors position it there. The authors, with their study on eighteen Italian social business incubators, find that different incubators have different missions depending on their particular context or peculiar history, nonetheless they can be grouped in three broad categories:

- generate social change and create positive impact on the local communities;
• foster a sustainable economic development by supporting entrepreneurial initiatives with high social and environmental impact;

• build a community of social innovators.

Moreover, the authors highlight, and explore beyond the simple categorization presented before, some of the themes emerged during the interviews: the relationship with the local community and more in general with the area in which the incubator is established is felt deeply, and the wish of being agent of positive change is present (these two can be summarized in the first “mission category”). The ways to pursue those, for the authors, are partly through the incubation of the right initiatives, the second “mission category” (here the importance of selecting tenants keeping in mind the objective of the incubator returns), partly with the organization of events, partnerships with local institutions and other actions of involvement in the territory that foster the creation of a culture and a community of people both sensitive to social themes and pro-active in taking action (third “mission category”). The authors specifically cite the will of creating a community of social innovators, change-makers with common values and identity that through collaboration, sharing of ideas and support generates ideas, innovation and change (also Toivonen (2013); Surman (2014); Wittmayer et al. (2015)).

The last piece of the identity is the background of the management team, the choice of the authors of putting this element in a relevant position is understandable: the management team can be considered as the spine of the incubators, different experiences may sway in a non-negligible way how the social business incubator is run and what is its offer. For example, the authors noticed that the interviewees with the most well-structured programs had in their management team people with an economic background and experiences in finance, consulting, or firm management.

The next macro-area is the business model, in the specific case the authors used the Business Model Canvas (Osterwalder and Pigneur, 2010) with particular attention on the areas of value proposition, key activities and revenue streams. Simplifying, the focus here is the services, resources and benefits offered by the incubator and its sources of revenues, these can help to gauge the incubator’s sustainability, main activities and sponsors. The business model canvas is a rather specific tool, while useful for examining an organization it is not equally useful to extract generalizable knowledge.

The last macro-area regards the structure of the incubation program that for the authors can be explored using the three main elements of an incubation model (same as traditional incubators):

• selection, that is the process the result of which is the decision to admit or not a candidate to the program;
incubation process, that describes content, features, duration, etc. of the support program;

graduation, that determines the conditions for the exit from the support program and the relationship with the graduate.

The authors go one step further and propose with a brief description three types of programs:

- pre-incubation program, it is a short one, three to six months, and the objective is to go from an idea to a vetted business plan;

- incubation program, it is a long one, twelve to twenty-four months, and the objective is to set-up and jump-start the enterprise;

- acceleration program, it is a medium one, six to twelve months, and the objective is to consolidate and scale-up the enterprise;

This kind of division seems to consider incubation not as a specific model, but as something more “stretched”.

With this last comment, I will introduce the work of Miller and Stacey (2014). The authors, through multiple interviews with incubators’ managers and advisers, incubated venture founders and on-site studies, understood that “incubation”, especially in the social setting, is a term too young to be confined in strict boundaries (as was highlighted before), therefore, it was better to talk about an incubation “phase” more than model.

Given this point of view, they tried, starting from empirical research, to divide in categories the support initiatives that they have found. Willingly (as they consider it the entire phase) and peculiarly they do not use the term “incubation”. While describing these categories may look like straying from the path, I think this is a good way to get a glimpse of the situation of social “incubation” in the world as it is. This is helpful because it goes beyond theory and offers a clean view of the reality, proves the multifaceted situation of social incubation and shows how the latter is developing and branching.

The categories will be described through their defining features and their business model/sources of revenue.

1. Impact accelerators defining features:

- open application process; anyone with an idea can apply;
- accelerator invests in companies, typically in exchange for equity, at pre-seed or seed stage;
• cohorts or “classes” of startups; not an on-demand resource;
• programme of support for the cohorts, including events and company mentoring;
• focus on teams, and not just individual entrepreneurs.

(Miller and Stacey, 2014, p. 15)

Impact accelerators business models:
• entirely grant funded;
• set up as a venture capital-like investment fund with associated management fees;
• supported by corporate sponsorship.

(Miller and Stacey, 2014, p. 15)

The authors noticed how this kind of programs started growing rapidly from 2010 (from the one to three founded in the previous years to the eight of 2010, and fourteen of 2011 etc.) and were located mostly in North America.

2. Social venture co-working space defining features:
• flexible desk and meeting space;
• opportunities to meet other ventures or entrepreneurs;
• a programme of events or learning to support ventures;
• primarily focused on hosting social or environmental ventures.

(Miller and Stacey, 2014, p. 17)

Social venture co-working space business models:
• charging a monthly membership fee to founders or startups based on level of usage [...];
• charging for use of events spaces or organised events;
• charging for or taking a commission on food and drink or catering;
• grant funding or social investment to fund initial development.

(Miller and Stacey, 2014, p. 17)

The authors noticed that most of the organizations in this category were referable to the “Impact Hub” network, they had a sharp growth starting from 2009 and were located mostly in Europe, with North America following.
3. Social venture academy defining features:

- classes are specifically aimed at social entrepreneurs or ventures;
- learning is not part of a wider qualification [e.g. graduation from an incubation program].

(Miller and Stacey, 2014, p. 20)

Social venture academy business models:

- charging for classes or courses;
- sponsorship of classes or courses;
- offering training or consultancy to corporate clients to subsidise offering to social ventures and founders.

(Miller and Stacey, 2014, p. 20)

The authors noticed that most of the organizations in this category were referable to the “School for Social Entrepreneurs” and were located mostly in Europe.

4. Impact angel networks defining features:

- a group of high net worth individuals investing in early-stage social ventures;
- sharing the costs and processes of search and due diligence;
- could be a formally constituted or more informal group;
- offering mentoring, support and connections beyond their initial investment.

(Miller and Stacey, 2014, p. 22)

Impact angel networks business models:

- a (typically annual) membership fee for members to cover the costs of due diligence;
- a commission on investment raised (typically 5 per cent);
- paid events, charging either investors, founders or both;

(Miller and Stacey, 2014, p. 22)

The authors noticed that most of the organizations in this category tended to become involved in the enterprises on later stages than the other categories, including accelerators, this unfortunately leaves the question of which position in the pipeline other investing actors (e.g. impact investment funds) have.
5. Social innovation prize and challenges defining features:

- widespread publicity for the prize and its aims;
- an online application process;
- shortlisting by the competition organisers;
- a pitch or face-to-face “final” where ventures meet a group of judges;
- follow-up support and publicity for the winners.

(Miller and Stacey, 2014, p. 23)

Social innovation prize and challenges business model: it is usually a sponsored event. The authors noticed that this kind of events were diffused in Asia, Europe and North America.

3.3.3 Services

It has been already highlighted that social ventures are ventures and therefore need the same services. Therefore, the offer is similar, for example Bank and Kanda (2016, p. 275) say “the support offered [...] is similar to that provided in any conventional incubator, particularly when selection is focused on the entrepreneur instead of the idea” and Lall et al. (2014, p. 13) “social impact-focused accelerators appear to be similar to the majority of incubators and accelerators in traditional business sectors that provide “high-touch", highly tailored services to a small group of enterprises” (the authors do not distinguish social incubators and accelerators); and the value proposal is not dissimilar, for example Giordano et al. (2015) cite:

- equipment and facilities;
- assistance and knowledge-based services;
- access to a network;
- access to finance.

And Lall et al. (2014), with their survey, show the percentage of organizations that offer each service (figure 3.19) and mention the benefits/services that incubatees obtain (easily referable to the ones cited for the case of “traditional” incubators): “media exposure, brand recognition, access to a co-working space, referrals to vetted talent and human capital, exposure to relevant and timely R&D, and membership in an extensive alumni network consisting of other like-minded entrepreneurs, service providers, and investors. The majority of accelerators [...] offer post-program support to all of their graduates at
The types of post-program services offered to entrepreneurs include: public relations opportunities, connections with investors, board participation, HR/recruitment support, regional meet-ups, alumni networking, and online communities listing funding and promotion opportunities.

In order to understand how social business incubators are different, it is appropriate to reflect on the fact that the category of the service is not the only important characteristic influencing the services offered. I am not considering only quality, as literature often remind (Lall et al., 2014), but also the content of the service. In fact, it can be sustainability oriented or tailored to the specific needs of the social enterprise (Bank and Kanda, 2016), without changing the class of services.

For example, Miller and Stacey (2014, p. 27), writing about formation, say: “one of the biggest differences between impact incubation programmes and conventional ones is the focus on teaching founders about different frameworks for measuring impact”.

Moreover, what can change is the importance given to particular features, for example for Giordano et al. (2015) co-working and networking have so much importance that can be defined as distinctive features: the spaces are seen as inspiring places where like-minded beings can exchange ideas, competences and develop relations (the authors see co-working as a critical factor to create a community and a network of innovators).

### 3.3.4 Selection

Just as services, selection for social business incubators shares its skeleton with the traditional counterpart. Therefore, the previous section on selection can be used as a base...
for this one.
First, it is better to remind something that may appear obvious to the ones learned in the topic, but that is better not to leave unsaid. The most critical difference between a social business incubator (or social impact incubator) and traditional (or more general) incubation is the social or environmental impact that the incubated ventures aim to have (Miller and Stacey, 2014), consciously or unconsciously depending if more or less importance is given to the motivation and more generally if the applicable definition is narrower or broader (more about this in the section about social innovation).

Miller and Stacey (2014, p. 27) say that most social incubation programs do what they call “selecting for impact”, that is using the selection process to ensure, or at least have higher chances of, having social enterprises with potential for a real social impact (this is akin, or better, the same as the concept already encountered of using selection to choose ventures that would help the pursuing of the incubator or sponsors’ objectives).

Giordano et al. (2015), writing about Italy, notice how sponsors (of the social business incubator or of a particular call, competition, etc.) have a say on which selection criteria to apply, usually in line with the values of both the organization and the sponsor and with the objectives of the call if that is the case.

Lall et al. (2014) give interesting particulars about the selection process of social business incubators, through their survey on fifty-two incubators/accelerators, they found that the average acceptance rate is more than fourfold the one of traditional incubators (21 per cent vs 5 per cent). They offer some reasonable explanations (without bringing evidence though): it could depend on the “short pipeline” that is a lack of applications that does not allow to be too selective, revenues may rely on philanthropic or governmental support or fees, this would be an incentive to have more tenants.

Bank and Kanda (2016), with their work on multiple case studies, concur on the idea that the narrowness of the selection is maintained only if there are enough valid tenants applying to the incubation program or, alternatively, using a wider scope, specific sustainability services can be offered if there is enough demand for them from the tenant ventures. The lack of applications or demand may stem from the inherent scarcity of quality tenants in the area (e.g. a big city with many universities will probably have more potential incubatees, than a remote area) or from the absence of organization supporting entrepreneurship in the area, from the inability of the incubator to adequately reach out or advertise itself or from the perception of the reputation or the capabilities of the incubator.
3.3.5 Issues and trends

Issues

Miller and Stacey (2014) present a group of heterogeneous issues, that partly reflects doubts present in the literature, partly worries coming from practitioners:

- one of the doubts that plagues social business incubators (and also traditional incubators, to be fair) is that they may act, at least some of them, as a form of life-support for enterprises that cannot survive outside a protected environment. The problem is that, for the general benefit, it would be better for them to fail in short time, instead of absorbing resources just to remain afloat;

- coming out from an incubation program, or even an acceleration one, does not guarantee that the social venture is investment-ready. This means that there is a gap between what investors search for and what incubators can provide and that graduate firms need more nurturing before being attractive for the majority of impact investors.

Miller and Stacey (2014) refer this problem, on the investment side, to the fact that many investors have a high threshold for what they call high-quality enterprises: they should already have market traction, a tested business model, a management team with a solid track record and measurable impact. Moreover, the transaction costs for this kind of investments are high, therefore, the vast majority of investors are ready to enter a deal only if the volume required is high, in so doing leaving a gap in the funding “structure” (called the “funding gap” by the authors).

Also Lall et al. (2014) talk about the same, referring to it as the “lack of a pipeline”, the main reasons for this, as it came out from the interviews to impact investors they did for their work, are that there is a lack of investable ventures and the capital is not well distributed along the pipeline. The first reason can depend both on the lack “raw material” (e.g. bad ideas or bad team) and on a lack of support that would help the ventures to become investable; the second reason may depend on the fact that there may not be both enough organizations and enough capital that support all stages of development;

- incubators’ business model is, in most of the cases, not financially self-sustainable and there is not a proven model of incubation sustainable in the long-term. Lall et al. (2014) found out, from their survey (previously cited), that the 74 per cent of incubators relied on philanthropic money for the 54 per cent of funding and that the second source of revenue were consulting contracts, so not directly linked with incubation activities, but using the by-product knowledge generated from them.
The same is noticed by Giordano et al. (2015) in Italy, where only few incubators had a stable income from incubation programs, while most relied chiefly on the income from renting space and consulting services;

- be sure that the incubatee stays true to its mission, or, at least, continues to pursue one that is aligned with the one of the incubator is not a laughable matter. The authors say, in fact, that some programs do not require the applicants to prove the social impact that they are creating or want to create before offering investment or support (the problem would be similar, if there was not any measurement on continuous or, at least, recurrent basis);

- another worry that is presented is the risk that equity investment may make the social ventures go astray. This depends on the fact that the newly founded investor is a new stakeholder, a relevant one, and his or her goals are not necessarily aligned with the ones of the venture;

- incubation is no magic process through which any firm can become an “unicorn”. The process of social incubation is aimed at helping ventures that have the potential (and the desire) to scale-up rapidly. Evidently, social ventures that do not have this potential or have more modest ambitions may not benefit or even be harmed by this environment;

- having a wide offer of mentors may result in problems for incubatees seeking advice, in fact, there is the clear possibility that mentors with, for example, different backgrounds give diverging or conflicting advice to the tenants, this can cause great confusion.

**Trends**

Having a look to the trends in social business incubation may be particularly helpful as the sector is still in development and far away from a stable configuration and trends may help seeing how it will evolve.

Starting from empirical research and focusing on how established programs were changing and adapting and how new initiatives were built, Miller and Stacey (2014) found the following insights:

- vertical specialization (intended by the author as a sector specialization), when numbers start to grow, it often happens that some specialization takes form, for example a sector one. It can be on a large topic like education or health, but also on more specific problems. The benefits are many, for example better synergies between the tenants and the capacity of rallying people that feel deeply a particular cause,
or increased economies of scale and learning and just more resources to dedicate to a narrower set of needs, but even a better reputation for the incubator (Barbero et al., 2012);

- domain specialization, this is about specializing in a particular approach (e.g. design thinking, lean startup approach, etc.). This allows the incubator to become better at what it does, the question is if it can cater all the needs of its incubatees;

- diversification, it is almost natural that in a rather “fluid” environment, with somewhat lacking resources, an answer is to diversify and expand the offer. Incubators and accelerators may add a co-working space to have more stable revenues, or start an investing business to reap the fruits of their incubation program, co-working spaces may move to the offer of more value-added services etc. Another type of expansion is a geographic one that may increase the pool of applicants, the strength of the network and the reputation of the organization. It is interesting to notice how the trends go both toward specialization in some aspects and toward diversification in others;

- the last trend is, almost obviously, measurement and Miller and Stacey (2014, p. 37) put it down rather “elegantly”: “as more and more incubation programmes and platforms open up, there is a push towards transparency. This comes from a demand from ventures who might be comparing programmes as well as from existing and potential funders and investors who want to see the track record of programmes before offering their support. Put bluntly, social venture incubation is becoming a much more competitive field”, after all there is no improvement without measuring and there is no credibility without data.
3.4 Context

3.4.1 Italian History of Incubators and Third sector

Similarly to other parts of the world, business incubators were initially located in areas struggling economically, like where factories were closing and in some depressed areas of the south (Ahmad and Ingle, 2013; Auricchio et al., 2014), Colombo and Delmastro (2002) support that and add that, at the time of publishing, BICs had a higher concentration in the south of Italy. At the time, the public sector was an important player for the creation of these initiatives (BICs), especially the “Società per la Promozione e Sviluppo Imprenditoriale” (SPI), as they were seen as a tool to promote economic restructuring (even if not as strongly as now) (Auricchio et al., 2014). The first incubator in Italy was a Business Innovation Center, specifically, “BIC Liguria”, that was founded in 1990 (OECD (1999) argues that the primacy belongs to “BIC Friuli Venezia Giulia: Trieste”, that opened some months before, to be fair “BIC Liguria”, as known as “Sviluppo Italia Liguria”, became operative in 1990, but was legally founded in 1987) in the industrial area of Genoa that was seeing an important decline (Ahmad and Ingle, 2013).

At the end of the 1980s, science parks (the first in Italy was the “Area Science Park” of Trieste, founded in 1982 (Colombo and Delmastro, 2002)) started offering incubation programs (Auricchio et al., 2014).

At the end of the 1990s, instead, university incubators started to spread, they provided services similar to the others (BICs and science parks), but with a greater focus on technology transfer.

Since 2000, incubation acquired prominence in the government agenda and was increasingly seen as a tool to bolster and encourage entrepreneurship and, as a consequence, the local development (Ahmad and Ingle, 2013; Carrera et al., 2008). In the same years, business incubators from private initiatives started to flourish (Auricchio et al., 2014).

Social incubation is, instead, much younger: Giordano et al. (2015) say that social business incubators started to gain particular relevance thanks to the increasing importance of social economy and the rising awareness that social entrepreneurship can actually be an effective tool to reform the welfare system and build a new model of sustainable development.

Social incubation started showing itself in the first years of the 2000s, even before the 2006 law on social enterprises (legislative decree of the 24th of March 2006, n. 155: “Disciplina dell’impresa sociale, a norma della legge 13 giugno 2005, n. 118”), on insistence of the government in order to foster a more business-like behavior in the third sector (Giordano et al., 2015) and to promote competition in the provision of goods of social utility (Chirico
Law on Social Enterprises (Law no. 155/2006).

Criteria:

- it is a private legal entity;
- it engages in regular production and exchange of goods and services having “social utility” (see list of sectors below) and seeking to achieve public benefit purpose (an organization is considered a social enterprise if it generates at least 70 per cent of its income from entrepreneurial activities i.e. production and exchange of goods and services having social utility);
- the enterprise can make profit, but cannot distribute it to its members or owners (non-distribution constraint). Profits have to be reinvested to further its main statutory goal (public benefit), or to increase its assets;
- in addition, a social enterprise needs to respect some good governance principles such as transparency, openness and participatory decision-making.

Social enterprise (legal) sectors:

- welfare;
- health;
- social care;
- education, instruction and professional training;
- environmental and eco-system protection;
- development of cultural heritage;
- social tourism;
- academic and post-academic education;
- research and delivery of cultural services;
- extra-curricular training;
- support to social enterprises.
Only in 2010, social business incubators, as described in previous sections, arose (i.e. supporting the early stages of social projects, startups and entrepreneurs) (Giordano et al., 2015). It is easy to see, even in a practical way, how social incubation, especially in Italy, is something at its first steps.

While support mechanism started in “recent” years, non-profit organizations were present since the 1970s, but were mainly focused on advocacy functions (primarily for their own members) and had few reasons and opportunities to engage in economic activities in an independent way (Chirico et al., 2014). Instead, social businesses in the form of social cooperative-like organizations were present since the 1980s, as a response for the economic downturn of the 1970s (that came within a context of aging population, disintegration of the traditional family and emerging of new social problems and needs like the treatment and prevention of drug abuse, immigration phenomena, high level of unemployment and of people without fixed dwelling (Chirico et al., 2014)) that saw the state and the philanthropic organizations unable to cope with the needs of the society; thus, new non-profit organizations started to develop entrepreneurial behaviours to fill the gaps, while Italian laws was still imposing a clear profit/non-profit distinction (Borzaga et al., 2014). They usually took the cooperative form, for its particular features: they were treated as enterprises with full freedom of doing business, but they had a recognized social aim, a democratic governing structure and a profit distribution constraint (Borzaga et al., 2014). In the 1980s, they were driving the growth of the Third sector, strongly integrated in their communities and providing crucial community interest services (Borzaga et al., 2014). They defined themselves as “social solidarity cooperatives” and, strong of their important position in the society, started lobbying the government for legal recognition (Chirico et al., 2014).

In 1990 the Italian government decided to delegate the responsibility of providing social services to regional and local administrations and it also liberalized the market of social services, opening it to privates and competition and these reforms also paved the way for the ones of the following years (Chirico et al., 2014).

Moreover, the term “social enterprise” appeared for the first time in an Italian journal in 1990 (the journal was named “Impresa sociale”) and in 1991 the Italian government approved a law that instituted social cooperatives (law number 381 of the 8th of November 1991) and gave them some benefits (Defourny and Nyssens, 2012).
LEGGE 8 novembre 1991, n. 381
Disciplina delle cooperative sociali.
Articolo 1: Definizione

1. Le cooperative sociali hanno lo scopo di perseguire l’interesse generale della comunità alla promozione umana e all’integrazione sociale dei cittadini attraverso:
   a) la gestione di servizi socio-sanitari ed educativi;
   b) lo svolgimento di attività diverse - agricole, industriali, commerciali o di servizi - finalizzate all’inserimento lavorativo di persone svantaggiate.

2. Si applicano alle cooperative sociali, in quanto compatibili con la presente legge, le norme relative al settore in cui le cooperative stesse operano.

3. La denominazione sociale, comunque formata, deve contenere l’indicazione di “cooperativa sociale”.

Italian Government (1991)

The law of 1991 can be considered pioneering, it was the first on the continent and was taken as example by other countries as can be seen in figure 3.20 (Borzaga et al., 2014).

Another milestone for business incubators and social enterprises is the legislative decree number 179 of the eighteenth of October 2012, later modified with the law number 221 of the seventeenth of December 2012 (modified again with the legislative decree number 76/2013 (Italian Government, 2013) and 3/2015 (Italian Government, 2015)), as known as “Decreto Crescita 2.0” (Italian Government, 2012) that I cited previously to present the definition and the requisites of a certified business incubator in front of the Italian
law. First, I want to highlight the fact that the certification for business incubators is not only a matter of reputation, on one hand, and requirements, on the other, but, also, it is about benefits both in terms of derogations from company laws and of fiscal nature, the latter are briefly summarized below (Italian Government, 2012):

- exoneration from some contributions to the Chamber of Commerce;
- emission of particular financial instruments;
- remuneration through equity (i.e. working for equity);
- tax discounts linked to the hiring of highly qualified human resources;
- simplified and free access to the “Fondo di garanzia” for small and medium enterprises (the fund provides collateral for loans).

Secondly, I want to give some attention to the “innovative startup with a social vocation” that is another legal form established by the aforementioned law. Some requirements are in common with the ones of the “innovative startup” like being newly-formed (no more than five years old), having at least an Italian branch, having yearly revenues not exceeding five millions of euros, being barred from distributing profits (in general they seem requirements apt to identify firms in early stages) and having at least one of the following: a relevant expenditure in research and development, a relevant presence of highly qualified employees (at least one third with a master or higher degree) or own at least one patent (these requirements seem to be present to ascertain the innovative nature of the enterprise). In addition, the “innovative startup with a social vocation” has to operate in one of the sectors mentioned in the previously cited law of 2006 (the list can be found in the appropriate box).

The law from which I extracted these two highlights can be seen as a proof of the attention of the Italian government to the topic of incubation, social business and newly formed businesses in need of assistance and therefore of their prominent role in the Italian social and economic landscape.

### 3.4.2 Trends and challenges, in act and future

In the past societal challenges were mainly dependent on the intervention of the state and on philanthropic activities, now things are changing and what was seen as a problem is consider both, still, a problem and an opportunity, evidently this change cannot not affect also the public sector that has to face new needs and a system that is changing (EC, 2013). Next, I will present the main trends that Europe, and therefore Italy (and
in some cases the world) has to take in account.

**Demography** trends, in particular migration and aging.

More and less recent events have led people of some regions to leave their home in order to escape war, persecution or just to seek better living condition and the problems that this migration creates are felt; the United Nations estimated that in 2005 a third of the people not living in their country of origin was living in Europe (EC, 2013). Immigration in recent years has increased, while people are a resource in itself (they bring workforce, diversity and dynamism) they need some conditions to become productive and value-generating, the profound change that they bring generates intolerance and racism, if not well managed, and the performance of the European Union has not been bright, not from a point of view of integration nor on the provision of services and employment (Hubert et al., 2010). While migration patterns will inevitably change in the next decade, Europe will probably remain a destination for neighbouring countries (Hubert et al., 2014).

European population is ageing, in 2050 half of the population will be older than 52.3 years (up from the 37.7 of 2003) and the percentage of retired workers will roughly double and it will be around the 54 per cent (EC, 2013). Huge demographic changes mean diverse needs, for example older people will need more resources allocated to pension, care services, and health expenditure and problems like isolation and exclusion will be exacerbated, but it should not be forgotten that elderly people are a reserve of knowledge, the challenge is to transform it in a productive asset (Hubert et al., 2010). This trend will not go away, but it will become increasingly evident, and in 2030 Europe will already have an average age among the highest (Hubert et al., 2014).

Another trend in act that will continue is urbanization: by 2030 more than 50 per cent of the world population will have moved to cities and this number will reach the 80 per cent for Europe, on one hand this will make the cities more important and the need of prepare them for this influx more pressing, on the other hand there will be the problem of the depopulation of the countryside (Hubert et al., 2014).

**Environmental** trends, in particular climate change, water and energy.

Climate change is and will be something to take in account, countries will have to face change and adapt, and this implies costs (Hubert et al., 2010). In order to get an idea if the temperature of the 2080s were to happen now there would be an estimated loss of GDP (Gross Domestic Product) in Europe of twenty billion euros for the 2.5°C increase in average temperature and of sixty-five billions for the 5.4°C increase (EC, 2013). Water is a precious resource and it will be even more with the increased demand for it led by the increasing population, but in Europe 20 per cent of surface water is seriously at risk of pollution, 60 per cent of European cities over-exploit their aquifers and 50 per cent
of European wetlands (many are important for the replenishment of the aforementioned aquifers) are endangered (EC, 2013). The present society can be considered a power-hungry one, as, more often than not, to growth in economy and population correspond an increased demand for energy, and the problems of where to find this energy and, for example, climate change follow. The European Union had set challenging targets to become a low-carbon economy, while sustaining growth (the so called 20-20-20 targets, 20 per cent reduced emission of greenhouse gases, 20 per cent increase in energy efficiency and 20 per cent of renewable energy on the total consumption by 2020) (EC, 2013).

New community trends, in particular diversity and the digital society.
Diversity is a more and more common theme, also in the workplace, and for good reasons, it seems: 83 per cent of European companies with some kind of diversity policy, notice benefits from it, on the top there is the solution of labour shortages and enhanced reputation (EC, 2013). The empowerment of women, together with gender equality, will increase led by a better access to education, greater access to advanced education that, in turn, may generate additional support for even greater equality and empowerment (Hubert et al., 2014).

Almost 30 per cent of Europeans never used internet (mostly elderly people), closing the digital divide for them (both the elderly and all the others) may help disadvantaged social groups to participate in a society that is more and more digital, both in terms of access to services like eLearning, eGovernment and eHealth and increase in their employability and quality of life (EC, 2013). The digital divide between countries and regions in terms of infrastructures, instead, will persist and if not closed may deepen the inequalities as it will “accelerate” some people or countries (usually the ones that are already more advanced and richer) leaving the others behind (Hubert et al., 2014).

Poverty-related trends, in particular poverty and child poverty and social exclusion.
Poverty overall will fall globally, but there is the risk of growing economical inequalities within states (at this time within-countries inequalities are rising, while between-countries ones are decreasing) (Hubert et al., 2014). For example, the European Union that one may consider an advanced country, still suffer from huge poverty problem, in 2010 the 16.4 per cent of the population was considered poor, number that rose to 25 per cent when considering only minors, the number is also higher than average for groups facing social exclusion (Roma, immigrants, undocumented migrants, homeless, people living in or leaving institutions, etc) (EC, 2013), this is evidently problematic because the chances are that these people will have a reduced participation in the society in all it aspects (education and more generally opportunities) and this will led to greater inequalities (deprivation, harmful lifestyle, underachievement and exclusion) (Hubert et al., 2010).
Another problem is unemployment that has risen greatly (especially the youth one) after the 2008 crisis (that also exacerbated other problems and constrained budgets) (Hubert et al., 2010). Unemployment will be a topic that matter for the coming years as projections foresee a surplus of low-skilled workers (also as a consequence of rapid technological development and a subsequent mismatch between skills demanded and offered (Hubert et al., 2010)) that could easily become a situation of permanent joblessness, especially among the youngest without advanced training and the older if unable to change (Hubert et al., 2014). This, together with the fact that gains from productivity growth tend to be in the hands of high income workers, will make income inequality expand (Hubert et al., 2014).

**Health and well-being** trends, in particular the health divide, increasing costs and happiness.

The health care expenditure is growing, partly for the aging of the population, partly for diseases linked to affluence (e.g. obesity, stress, depression) (Hubert et al., 2010) and in 2008 the health care industry consumed an average of the 9 per cent of the gross domestic product in most developed countries (EC, 2013). Inequalities in health services provision are strongly present in Europe, both within and between countries, and in some cases, they are even growing (EC, 2013).

**Economic** trends, in particular technological development.

The trading of ethical good and services is increasing, for example, in 2010 4.36 billion euros were spent in Fairtrade products, up 28 per cent from the previous year (EC, 2013). The development of new technologies and the increasing reliance on research and development investments for innovation will be a strong trend until 2030 and after (Hubert et al., 2014), therefore there will probably be massive investments in research and development, but also in branding, marketing, logistic etc. (Carayannis and Von Zedtwitz, 2005). In order to stimulate innovation both education and cooperation between players (e.g. universities, businesses, financial institutions) to create an appropriate ecosystem will be important (Hubert et al., 2014). The expanding knowledge base and the higher intellectual content required for the provision of goods and services will increase the emphasis on higher education and lifelong learning, and this will come together with economies that tend to change to cope with a constant change of the context and an intensification of the competition (Carayannis and Von Zedtwitz, 2005). Innovation seems to be favored by some societal set-ups, specifically democracies and open societies, moreover, innovation is influenced by society and influences the organization of the society itself, in the coming years this behaviour will probably be more and more evident (Hubert et al., 2014).

The trends just presented, if left unchecked and unmanaged, may bring further problems:
people may struggle to understand and adapt to an increasingly complex and fast-moving world and, if they do, the results are risk aversion, lack of confidence in the public action and a disinterest for political engagement, these can come together with individualistic tendencies and a general radicalization of the society, exacerbated by the wide availability of unverified information and ways to create misinformed groups (Hubert et al., 2014). These problems are evident domain (also) of social innovation (the risk-aversion attitude may be detrimental though) (Hubert et al., 2014).

### 3.4.3 Ecosystem and barriers

**Barriers**

Many are the problems afflicting the entrepreneurial ecosystem, here defined as the start-ups, both social and not, plus other components that exist outside the startup, but are fundamental for its success, they are “actors” like support organizations, universities, financial resources providers, individuals considered both as costumers and as a talent pool, networks that are all the links that enable and facilitate exchanges between actors and institutions that are the ones that set the context and the rules of the “game”, like the government and the culture (Van Weele et al., 2016). Next, I will try to summarize them:

- lack of market orientation and entrepreneurial culture. European incubated entrepreneurs tend to have a strong technological background, but a not-so-strong disposition toward more business centered activities, this seems to be primarily rooted in institutions and culture (also in education) and does not seem so heavily present in America for example (Van Weele et al. (2016), in a study with 90 interviews to incubators managers and entrepreneurs of Western Europe). Looking back at the evolution of the business incubators that has been described in a previous section, this seems the situation of the years leading to the Dot-com bubble, i.e firm with a strong technological background, but low business skills.

Tightly connected and overlapping is a culture that does not encourage entrepreneurship and risk in general (the career of entrepreneur is perceived as risky), on the top of that failure is not socially accepted, this together with stringent bankruptcy law (on average) contribute to a high fear of failure that may inhibit entrepreneurial aspirations and desire for growth, a large number of entrepreneurs, in fact, are motivated by the desire of freedom that self-employment can give (Van Weele et al., 2016). The lack of entrepreneurial culture is cited by other authors: Wilkinson and ICF (2014); Aernoudt (2004) and Fernández Fernández et al. (2015), although with
focus on Spain that, for the authors, is representative for other countries of Southern Europe; the same can be said for the lack of business skills, Wilkinson and ICF (2014) and Carrera et al. (2008), with focus on Italy. For social enterprises this is even a greater problem as they often offer lower salaries and benefits and therefore have difficulties in acquiring such skills (Chirico et al., 2014);

- small domestic market. The market of individual European countries is rather small, compared to others like the USA one, and the common European market is fragmented and difficult to access, despite the intense effort of European policymakers to address the problem (Van Weele et al., 2016). This is, also, what is perceived by entrepreneurs that see other countries hard to reach for the differences in language, regulations (some of them), customer preferences, etc. and may partly explain the limited ambition to growth (i.e. entrepreneurs think local) (Van Weele et al., 2016). Social enterprises face additional “reduction” like the inadequate use of social clauses in public tenders (also noted by Chirico et al. (2014) in Italy), with the consequent higher competition, and other related current practices, like too large contract size and disproportionate requirements for the track record and also payment delays (that are problematic also for the others firms) (Wilkinson and ICF, 2014);

- lack of early stage capital. In Europe the capital market is not well developed, while seed funding (i.e. small amounts of money needed to start the company) is relatively easy to obtain, higher amount to be used for example for develop a proof of concept or scaling marketing activities (therefore it is not the volume typical of late-stage financing rounds) is felt as much harder to obtain and, in turn, investors in Europe find the fragmentation of the market unattractive, the same goes for the weak management and market focus of a startup, they are, also, risk-averse, this does not work well with the desire of the entrepreneur of being “free” (and therefore hesitant in giving away equity) (Van Weele et al., 2016). Access to finance is one of the problem most cited: Wilkinson and ICF (2014); Aernoudt (2004); Auricchio et al. (2014); and Giordano et al. (2015) highlight how the problem is particularly felt by social enterprises in Italy. This is also due to the restrictions on profit distribution that e.g. social enterprises ex-lege and innovative startups have and to the lack of fiscal incentives to private donors (Chirico et al., 2014). Moreover, spending reviews in Europe, and this is true also for Italy, in response of the economic crisis have reduced the public spending in sectors that are vital for social enterprises (Chirico et al., 2014);
• poor understanding of the “business side” of the Third sector. Both business and social business incubators and social enterprises have been mostly “integrated” in a non-profit culture (Wilkinson and ICF, 2014; Aernoudt, 2004), this is true when talking about both the culture in general and the public administration, the latter, especially in Italy, until relatively recent times have mostly considered the Third sector as non-productive in terms of value-added (Carrera et al., 2008);

• lacking of an adequately supporting regulation framework (Wilkinson and ICF, 2014). In Italy the barriers of regulation and bureaucracy are particularly felt: in many cases the legislative framework (both considering company law and fiscal regulation) is complex and fragmented and this cause a justified confusion, administrative processes tend to be lengthy and may come together with extra responsibilities and costs without clear fiscal benefits (e.g. in the case of social enterprises ex-lege) (Chirico et al., 2014; Auricchio et al., 2014; Giordano et al., 2015), taxation on both the enterprise and the workers is felt as too high (Auricchio et al., 2014).

Van Weele et al. (2016) present, also, how incubators from other part of the world (through 191 interviews made in Silicon Valley, Australia, Israel and the Greater Boston area) help overcoming or bypassing some of these challenges:

• in order to have more market oriented startups the business incubator itself should be more market oriented, relying more on private funding and having more staff with entrepreneurial experience, these would foster a customer centric approach and a more aware view of the start-up itself;

• in order to foster the entrepreneurial spirit the business incubator should foster interaction between startups and between startups ecosystem (e.g. with tour of the ecosystems of other countries) and create a supportive and tightly-knitted community of like-minded people. It is evident how the “solution” is not about changing the whole culture (that would be the solution, but is hard to reach), but to create an internal one through the selection of and interaction with high-quality entrepreneurs;

• in order to solve the small market problem, business incubators can help with the internationalization of the startup through the creation of global communities, international partnerships and “soft-landing” services. Therefore, it is about helping the startup to fit better in a different context, not to change the context itself.

• in order to ease the problem of lack of capital, business incubators should be good at filtering and preparing the best startups and connecting them to the investors. Having incubators with a high reputation for “producing” valuable startups and a
strong track record is helpful to curb the risk-aversion of investors. The authors notice that this solution may not have a great potential in Europe as the capital services are underdeveloped and at the time only few incubators could boast a strong track record (it sounds like the classic chicken and the egg debate);

Van Weele et al. (2016, p. 20-21) conclude: “all of these challenges have institutional roots, which makes it difficult to overcome them entirely. [...] Incubators can directly provide some of the resources that entrepreneurial ecosystems require, such as financial capital, mentorship or a physical infrastructure. Moreover, their emphasis on connecting start-ups to each other and to other actors means that incubators can play an important role in strengthening the ecosystem’s networks. Regarding the ecosystem’s institutions, our findings suggest that incubators address challenges in the entrepreneurial ecosystem by mitigating the effects of unfavourable institutions. Incubators do so by creating a “safe haven” that protects start-ups from these institutions or by bridging institutional differences between actors or countries. As such, incubators do not address the institutional causes of malfunctioning entrepreneurial ecosystems but provide symptomatic solutions instead”. I would like to add that, while incubators may not be able to single-handedly change the context, they can help: as highlighted in previous sections many raise awareness on different topics, like entrepreneurship, and are very involved with the local communities.

Actions to foster the entrepreneurial ecosystem are needed, even more for the social entrepreneurial ecosystem as it suffers more from the failure of traditional solutions and at the same time is a relevant component in the solution of some of the society’s problems highlighted before, for example:

- market failures are usually linked to positive and negative externalities, and social enterprise tend to have a lot of the former, that together with information asymmetries, biases, inertia and general complexities draw a bleak picture;

- the public sector usually faces a constrained budget, and increasing and diversifying needs make public service provision difficult, on the top of that general inefficiencies, inertia paired with a sometimes low civic sense of the users of services make the provision of services hardly sustainable, if then it is added the sky-high debt level of many countries further spending is risky;

- the civic society is at the same time important and underfunded, small and fragmented and does not manage to attract the necessary talents. Moreover, while hardships should stimulate innovation, the overly intense reliance on the state is detrimental in the same situation.
Wilkinson and ICF (2014) and also Hubert et al. (2014) present what they think are the most important areas of intervention to foster the social entrepreneurial ecosystem (the same can be easily translated for application in the more general contest though), the summary can be found in figure 3.21.

Certifications and labels are not widespread in Europe and not very used (Wilkinson and ICF, 2014), the same can be said of Italy, but it is possible to highlight some example: the social reporting tool “Bilancio sociale” that is mandatory for example for social enterprises ex-lege and social cooperatives (Chirico et al., 2014), the self-certification of impact that innovative startups with a social vocation have to present to be recognized as such.
and the “b-corp” (benefit corporation: both the social scope, i.e. benefit, and the profit scope must be indicated in the statute of the company and the performance for both should be properly reported each year). Evidently, the main benefit from certification and labels is of reputational nature, and it is about increasing the legitimacy of the firm itself.

An appropriate legal framework that both recognizes the particular form of the enterprise and clearly defines boundaries and obligations is useful because, on one hand, gives recognition and legitimacy, on the other, cuts down complexities and difficulties in the constitution and operation of the enterprise. In Italy, as it has been noted previously, the situation is good (there is official recognition for different forms of social enterprise), but not very good (the regulation and bureaucracy are still perceived as too complex and taxing). In Italy, in order to obtain capital there are actors both in the ordinary credit market and in the specialist one. Social cooperatives are often the most financially healthy as they can count on self-financing and usually have favorable credit terms with ordinary institution (this is due to being historically low-risk, except for some cases, working in large part in the public sector that is less susceptible to crisis, but not immune, and being small enough to allow the financial institutions to diversify risk) (Chirico et al., 2014). Specialists that target social businesses are both financial actors that cater to the business ordinary needs and actors that are dedicated to social impact investing, other sources may be social impact bonds, grants and donations, but more than the types of financing option available, it is interesting to understand if they are enough, and the answer is generally no, considering also the adequacy of their form to the social business and the credit rating applied (often not customised to the social business or influenced by the bad credit rating of some larger social business) (Chirico et al., 2014). Networks and mutual support mechanism are generally well established in Italy, for example social cooperatives are often grouped in consortia to be more effective and provide support like (Chirico et al., 2014):

- regional identification, economic cooperation and training;
- good practice exchange and trade union representation;
- strategic planning, management, capacity building programs, joint projects and access to international experience;
  (Chirico et al., 2014, p. 9)
- they have their own funds to invest;
- they can act as general contractors for public bids and negotiate loans (usually local
3.4.4 Data on Italy, incubators and social businesses

In this section, I will present data on incubators (primarily Italians), then on social businesses (again primarily Italians) and then on Italy (from an entrepreneurship point of view). Auricchio et al. (2014), with their data dated 2012 (study on 58 Italian incubators and 164 incubatees), give a first glimpse to the Italian situation. The first thing they notice is that two thirds of incubators have a public nature and three quarters define themselves as non-profit, and while the public nature and non-profit orientation almost coincide, private incubators are more or less divided between the two orientations; in particular the South has more public realities, North-West private ones, North-East has more for-profit incubators and the Center more non-profit entities. Moreover, the authors point out that around 9 per cent of incubators changed their profile during the years, but without a specific pattern, this suggests that there is no dominant model (also Von Zedtwitz and Grimaldi (2006), but they motivate it with the co-existence of highly specialized and unfocused incubators and the contamination that existed between types of incubators, already presented in a previous section). Literature tends to agree on the largely non-profit nature of incubators, but, looking at the study on social incubators and accelerators of Lall et al. (2014), already mentioned in other instances, the results are different, with only 44 per cent of their sample set-up as non-profit and 17 per cent as hybrid.

Back to Auricchio et al. (2014), the three quarters of incubators say to have connections with universities or research institutes, but only half of them consider these links as strong, the absence of connections is more frequent in for-profit incubator. It is appropriate to remind that having connections with relevant players of the entrepreneurial ecosystem (so, also universities and research centers) is a mandatory requirement for the incubator certification.

Half of the incubators surveyed had been founded between 2003 and 2009 (they would be eight to fourteen years old now), so in quite recent times. Looking instead at Lall et al. (2014), it is possible to see that most (72 per cent) are even more recent, specifically founded in the last ten years.

Back to Auricchio et al. (2014), the average number of employees was sixteen, but the 60 per cent of the respondents had less than eight and the 40 per cent less than four. It is worth to notice that only a small part of employees was part of the incubator’s staff, the rest served directly the needs of the incubatee. Even more important for both the
employees count and other costs is the fact that many organizations do not have a clearly identifiable cost center (like universities and sometimes big corporation), therefore costs and employee attribution may be discretionary. Lall et al. (2014) find in their sample an average of eleven employees, with older accelerators (pre-2008) reaching twenty-seven and younger six.

Back to Auricchio et al. (2014), regarding the institutional objectives of the incubators, the authors say that the main ones are the creation of jobs and the industrial development in the surrounding area (the former is more present in the South, the latter in the North), follows the generation of profits for the partner organizations (figure 3.22, from 1 less important to 5 more important, the values are in percentage). Lall et al. (2014) notice how the objectives of their sample, focused on social, could be broadly categorized as generation of employment and of products and services for the underserved. Employment seems to be a constant both in the general Italian incubators landscape and in the wider social global one.

Back to Auricchio et al. (2014) sample, the costs of an incubators are formed first by facilities expenses (47 per cent), followed by the provision of consulting services to the incubatees (29 per cent). The percentages do not change much between public and private incubators, while the cost of facilities is lower for incubators linked to universities and research institutes (maybe there are synergies, maybe is the aforementioned costs center problem). Moreover, costs are highly and positive correlated with the number of employees. On average 55 per cent of these costs were covered through the income generated by the provision of services to the incubatees (considering also rent and facilities), but
Based on Auricchio et al. (2014, p. 19) the 41 per cent (34 per cent for profit oriented incubators) was not covered by revenues (in the majority of cases the difference was covered by public entities). For the sample of Lall et al. (2014), the situation is both similar and different as the incubators are not self-sustaining with the 74 per cent of them relying on philanthropy for the 54 per cent of funding, but with a second most important source of revenue that is the one deriving from consulting contracts.

In Auricchio et al. (2014) sample, most incubators were using some kind of measure to evaluate their own performance and for the 72 per cent of them those indicators determined a variation of external funds, the most used were number of incubatees, number of employees and economic performances of the incubatees, moreover private incubators tended to have a more complete set of indicators.

The authors offer an handy table to summarize the services offered (or not) by their sample (figure 3.23). What can be considered the “base package” (Auricchio et al., 2014, p. 19) offered directly by the incubator (space, facilities and tutoring) is very well diffused, as it is the networking with research centres, but also the other networking activities are not irrelevant; also access to finance is offered in a conspicuous way, even if not by a qualified majority. At the end of the list there are specialist services (except marketing).

The authors notice that, regarding the services in which incubators identify themselves

<table>
<thead>
<tr>
<th>Services</th>
<th>Offered directly by the incubator</th>
<th>Offered by third parties</th>
<th>Not offered, but widely available in the area</th>
<th>Services in which the incubator identifies itself most (max. 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space</td>
<td>94.8</td>
<td>3.4</td>
<td>5.2</td>
<td>43.1</td>
</tr>
<tr>
<td>Facilities</td>
<td>89.7</td>
<td>3.4</td>
<td>1.7</td>
<td>20.7</td>
</tr>
<tr>
<td>Networking with research centers</td>
<td>77.6</td>
<td>6.9</td>
<td>19</td>
<td>27.6</td>
</tr>
<tr>
<td>Tutoring and mentor-ship</td>
<td>75.9</td>
<td>27.6</td>
<td>13.8</td>
<td>50</td>
</tr>
<tr>
<td>Marketing assistance</td>
<td>55.2</td>
<td>25.9</td>
<td>29.3</td>
<td>10.3</td>
</tr>
<tr>
<td>Access to equity finance</td>
<td>53.4</td>
<td>29.3</td>
<td>19</td>
<td>20.7</td>
</tr>
<tr>
<td>Networking with customers and suppliers</td>
<td>51.7</td>
<td>13.8</td>
<td>31</td>
<td>6.9</td>
</tr>
<tr>
<td>Access to debt finance</td>
<td>46.6</td>
<td>15.5</td>
<td>31</td>
<td>3.4</td>
</tr>
<tr>
<td>Support to IP management</td>
<td>37.9</td>
<td>22.4</td>
<td>32.8</td>
<td>10.3</td>
</tr>
<tr>
<td>Administrative services</td>
<td>37.9</td>
<td>36.2</td>
<td>29.3</td>
<td>12.1</td>
</tr>
<tr>
<td>Recruitment services</td>
<td>32.8</td>
<td>34.5</td>
<td>41.4</td>
<td>10.3</td>
</tr>
<tr>
<td>Others</td>
<td>20.7</td>
<td>24.1</td>
<td>46.6</td>
<td>1.7</td>
</tr>
<tr>
<td>Legal services</td>
<td>13.8</td>
<td>1.7</td>
<td>6.9</td>
<td>8.6</td>
</tr>
</tbody>
</table>

**Figure 3.23:** Based on Auricchio et al. (2014, p. 19)
most, public incubators lean toward “logistic” services, while private ones more toward access to finance and administrative services, tutoring, instead, is kept in high consideration, regardless of nature or orientation.

Regarding the geographic distribution, the authors say that a “North-West” model that offers more value-added services (e.g. tutoring and mentoring) and a “South” model that offer more logistic services can be found (other areas have intermediate characteristics).

Regarding the size (based on the number of incubatees), larger incubators find space, tutoring and networking with research institutes of major importance (they are not of negligible importance also for smaller incubator), smaller incubators prize the access to equity finance and the smallest class prizes also the administrative support.

In the sample of Auricchio et al. (2014), the selection was mainly (82.5 per cent) a continuous process that is: applications were evaluated as they came; it is worth noting that a small number of incubators received around the 80 per cent of applications, it is a strongly polarized system; interestingly the one that received the most application (750) it is just on the average for Europe (749) (Auricchio et al., 2014). Most of the applications were concentrated in the North-West, the least in the South, the acceptance rate is also the lowest in the North-West (4.5 per cent), and the highest in the Center (23.4 per cent).

For the sample of Lall et al. (2014) the average acceptance rate is 21 per cent, while they report that for traditional business incubators is around 5 per cent.

Regarding the sectors in which incubatees operated, the two main ones were professional services and internet, followed by software related, electronics and energy, they seem to be sectors with low starting investments or with a relatively low risk, that seems in line with a general context of lack of venture capital and a risk-aversion attitude of firms (Auricchio et al., 2014). Regarding (Lall et al., 2014) sample, the 20 per cent of incubators were focused on only one sector and another 40 per cent on multiple specific sectors and the sectors more represented were health, clean energy and agriculture (all around 34 per cent).

Regarding the incubation process, Auricchio et al. (2014) say that the average incubation time is thirty-nine months (in USA was 3 years and in Germany was 3 to 7 (Aernoudt, 2004)) with a higher involvement of the incubator’s staff in the initial phase and lower in the next phases, until a very limited one once the incubatees had graduated. Additionally, more than half of the incubators had less than ten tenants, while around 15 per cent had more than twenty. Considering the incubatees of the same sample, 32 per cent of them received external capital during the incubation period.

Regarding the incubatees of the sample: the 88 per cent is a limited responsibility company (“società a responsabilità limitata (s.r.l.)”), the 61 per cent had an age of less than
five years, the median value of employees was 4 (5.6 the average) with older firms having more employees.

Chirico et al. (2014), using different secondary sources (e.g. Istat, etc.), give some estimations on the number of social enterprises in Italy (figure 3.24), both legally recognized and the ones meeting or partially meeting the European Union operational criteria, briefly mentioned below:

- engagement in economic activities;
- explicit and primary social aim;
- asset lock;
- limits on profit distribution;
- organisational autonomy from the State and for-profits;
- inclusive governance - democratic decision making and / or participatory governance.

The authors also manage to retrieve data about the sectors, the employees and the volunteers of social cooperatives (figure 3.25), this evidently does not represent the whole population of social enterprises, but it can give an idea on what are the covered sectors in the social landscape.

In order to present the Italian entrepreneurship, I will rely on the latest report of the Global Entrepreneurship Monitor about Italy (Muffatto et al., 2015), the data are gathered from the answers of a survey from at least two thousand individuals aged between
<table>
<thead>
<tr>
<th>Sector</th>
<th>Number of organisations</th>
<th>%</th>
<th>Employees</th>
<th>Total</th>
<th>%</th>
<th>Volunteers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social care and civil protection</td>
<td>4,452</td>
<td>40%</td>
<td>170,617</td>
<td>53%</td>
<td>17,959</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic development and social cohesion (Includes Type B)</td>
<td>3,654</td>
<td>32%</td>
<td>68,855</td>
<td>21%</td>
<td>13,472</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>1,192</td>
<td>11%</td>
<td>54,327</td>
<td>17%</td>
<td>4,867</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education and research</td>
<td>899</td>
<td>8%</td>
<td>15,950</td>
<td>5%</td>
<td>3,117</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culture, sport and recreational activities</td>
<td>747</td>
<td>7%</td>
<td>6,518</td>
<td>2%</td>
<td>2,111</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>128</td>
<td>1%</td>
<td>1,881</td>
<td>1%</td>
<td>166</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperation and international solidarity</td>
<td>24</td>
<td>&lt;1%</td>
<td>70</td>
<td>&lt;1%</td>
<td>388</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection of rights and political activity</td>
<td>19</td>
<td>&lt;1%</td>
<td>102</td>
<td>&lt;1%</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade union and representation of interests</td>
<td>14</td>
<td>&lt;1%</td>
<td>248</td>
<td>&lt;1%</td>
<td>23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philanthropy and promotion of volunteering</td>
<td>9</td>
<td>&lt;1%</td>
<td>81</td>
<td>&lt;1%</td>
<td>72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>126</td>
<td>1%</td>
<td>1,864</td>
<td>1%</td>
<td>156</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11,264</strong></td>
<td></td>
<td><strong>320,513</strong></td>
<td></td>
<td><strong>42,368</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 3.25:** Based on Chirico et al. (2014, p. 24-25)
eighteen to sixty-four and from a panel of experts. 

in order to better understand the terminology used, I will explain it beforehand:

- a “factor-driven” economy is characterized by the production factors, therefore by unqualified workforce, large availability of natural resources and subsistence agriculture;

- a “efficiency-driven” economy is characterized by a more competitive economy thanks to industrialization, economies of scale and large capital-intensive conglomerates;

- a “innovation-driven” economy is characterized by a high importance of knowledge, technology and services sector, but it should also have healthy economic foundation and an efficient context;

- the “TEA” of a country is the percentage of population in working age involved in new enterprises, including both “nascent entrepreneurs” and “owner-managers“ of a new firm (the former are considered so from the formation of the firm to the “birth event” that is the payment of salaries for more than three consecutive months; a firm is considered new from the birth event to the 3.5 years of age), to be noticed, in all cases except the first TEA is used to indicate the absolute number of nascent entrepreneurs/new firms;

- “necessity-driven” entrepreneurship is about the motivation to become an entrepreneur, in this case is because there was no other option, “opportunity-driven” because there was an opportunity, “improvement-driven” when the main driver for being involved in the aforementioned opportunity was the desire of increasing the own income or freedom;

Italy is considered an innovation-driven country, this kind of countries tends to have an entrepreneurship level (TEA) lower than the other, but Italy is in the second-last place among the innovation-driven economies, last if considering only the nascent entrepreneurs. Innovation-driven economies tend to have a quite high ratio of opportunity-driven over necessity-driven entrepreneurship relative to the other economies. The average value for Europe is four times, but there are virtuous cases like Norway (24 times), Denmark (17 times) and Sweden (11 times). Italy, in this regard, is well positioned with a ratio of 6. Considering instead the perceptions of the population, the 26.6 per cent perceives good entrepreneurial opportunities in Italy, this is a fundamental driver for the growth of opportunity entrepreneurship. The perception of the own entrepreneurial capabilities usually goes hand in hand with the perception of opportunities, but there are some exceptions: northern countries with high opportunities perception have lower capabilities perception,
while southern countries have the opposite situation (in Italy the 31.3 per cent think that they have good entrepreneurial capabilities). The latter group, therefore, perceives the context as a hindrance to the creation of new ventures. Another factor that slows down new firm’s creation is the fear of failure (in Europe, failure tends not to be very tolerated), the average of European countries is around 40.7 per cent and Italy’s is higher at 49.1 per cent.

New entrepreneurs in Italy are mostly absorbed by activities like commerce, catering, etc. (48.2 per cent, based on TEA), and are located in higher percentage in Sicily (14.4. per cent of TEA), Lombardy and Veneto follow (13.3 per cent and 12.2 per cent), all can be found in figure 3.26.

The most dynamic age bracket in Italy is the 25-34 one (with 35 per cent of TEA), 35-44 and 18-24 follow (with 28 per cent and 20 per cent), while the 36 per cent of TEA has a high school degree, followed by a middle school degree (33 per cent) and a university degree (21 per cent).

In figure 3.27, a summary can be found for the values cited for Italy.

Moving to the results generated by the panel of experts, the factors that were found most critical were the lack of both adequate policy on entrepreneurship and adequate entrepreneurial formation. On two statements there was almost complete consensus: new firms cannot be legally formed in short time (a week) and bureaucracy is too much (both can be linked therefore to bureaucracy). Also, the fact that there is not enough entrepreneurial formation in schools had a near consensus (low variance). The presence
of enough sources of funding, instead, remains debated. It is worth noticing that the
problems did not increase delocalization, the opposite phenomenon happened, maybe to
reinforce links with the territories and quality perception.

<table>
<thead>
<tr>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nascent entrepreneurship rate (% of population)</td>
</tr>
<tr>
<td>New business ownership rate (% of population)</td>
</tr>
<tr>
<td>Early-stage entrepreneurial activity (TEA) (% of population)</td>
</tr>
<tr>
<td>Necessity-driven (% of TEA)</td>
</tr>
<tr>
<td>Opportunity-driven (% of TEA)</td>
</tr>
<tr>
<td>Improvement-driven opportunity (% of TEA)</td>
</tr>
<tr>
<td>Perceived opportunities (% of population)</td>
</tr>
<tr>
<td>Perceived capabilities (% of population)</td>
</tr>
<tr>
<td>Fear of failure (% of population)</td>
</tr>
<tr>
<td>Commercial activities (% of TEA)</td>
</tr>
<tr>
<td>Services to firms (% of TEA)</td>
</tr>
<tr>
<td>Manufacturing (% of TEA)</td>
</tr>
<tr>
<td>Primary sector (% of TEA)</td>
</tr>
<tr>
<td>18-24 years (% of TEA)</td>
</tr>
<tr>
<td>25-34 years (% of TEA)</td>
</tr>
<tr>
<td>35-44 years (% of TEA)</td>
</tr>
<tr>
<td>45-54 years (% of TEA)</td>
</tr>
<tr>
<td>55-64 years (% of TEA)</td>
</tr>
<tr>
<td>Primary school (% of TEA)</td>
</tr>
<tr>
<td>Middle school (% of TEA)</td>
</tr>
<tr>
<td>High school (% of TEA)</td>
</tr>
<tr>
<td>University (% of TEA)</td>
</tr>
</tbody>
</table>

**Figure 3.27:** Based on Muffatto et al. (2015)
3.5 Performances

First, I would like to spend just a couple of words about why performances and impact measurement are important. One problem is about resources, incubators and firms need resources to work, and the funders, be them private investors, donors, governments, and also the participants, in case of an incubation program, want to know if their time and money will be well spent and to compare the option to others (Irene et al., 2016; Lall et al., 2014; Hubert et al., 2014). Another problem is about legal recognition and ad-hoc policies, it is hard to get the support of a policy-maker if there is no hard proof that the initiative is going to be beneficial for the country (Irene et al., 2016; Hubert et al., 2014). Then, measurement is about communicating with a broad range of stakeholders, it is harder to be credible without any reliable data, in front of both shareholders and the public opinion at large (Irene et al., 2016; Hubert et al., 2014). Finally, measurement is fundamental to improve, to control operations and to plan ahead to achieve the desired results, this is true for both social and traditional businesses (Irene et al., 2016). Unfortunately, at least for social businesses, Irene et al. (2016, p. 3) notice that “a consolidated framework consistent with social business specific characteristics is still missing”, and, more in general:

- it is usually a multi-objective and multi-stakeholder environment (this is often valid also for traditional incubators (Bergek and Norrman, 2008));
- social impact has more often than not a qualitative nature (also Hubert et al. (2010));
- changes and benefits that are sought after may happen in the long term;
- due to the previous points the attribution of the effect to the cause may be difficult;
- due, again, to the previous points the costs, and the capabilities required for the measurement may be quite high (also Hubert et al. (2010)).

In order to start wrapping one’s mind around the topic, Vanderstraeten and Matthyssens (2010) present a summary of the main approaches to the measurement of incubators’ effectiveness:

- goal approach, the degree to which a business incubator meets its objectives. Usually for a traditional business incubator, it is mostly about firm survival and growth, but there are the issues of defining them in an unambiguous way and understanding if they are enough;
- stakeholder approach, the degree to which a business incubator meets the stakeholders needs. The issues are mainly about which stakeholders to take in account
and how, given that they have different objectives it is hard to put them together in an evaluation framework;

- **system resource approach**, the degree to which a business incubator manages to acquire its needed resources (e.g. network, management team, prestige, etc.). The issue is to link them clearly to a sustainable competitive advantage;

- **internal process approach**, the degree to which a business incubator’s internal process is healthy and efficient. The issues are that there is still no consensus on how an incubation process works and, therefore, on how a healthy one looks like.

Another thing that should be defined beforehand are the results that can be considered:

- “**output**” is the direct product of the effort (e.g. delivering of a service or product) (Voisey et al., 2006);

- “**outcome**” is the wider effect produced by the output and the effort in general, it can be divided in “hard outcome” that is a clear and quantifiable result or “soft outcome” that can be considered as an intermediate result before the hard outcome and it usually more difficult to quantify (Voisey et al., 2006). Outcomes should also be cleared from what would have happened anyway, the actions of others and unintended consequences in order to guarantee a proper attribution of the effects;

- “**impact**” can be considered the long-term effect of an effort and is of particular interest for social efforts, here the problems of attribution and quantification of results are even greater than the ones of quantifying the outcome.

Talking about outcomes, it is sensible to cite Hackett and Dilts (2004, p. 74) that define operationally the outcomes of an incubation process looking at the dimensions of growth and survival that, while not without problems and not comprehensive, can be considered as key and fundamental for the incubation effort. The outcomes, as described by the authors, are listed from the best success to the worst failure:

- the incubatee is surviving and growing profitably;

- the incubatee is surviving and growing and is on a path toward profitability;

- the incubatee is surviving but is not growing and is not profitable or is only marginally profitable;

- incubatee operations were terminated while still in the incubator, but losses were minimized;
incubatee operations were terminated while still in the incubator, and the losses were large.

Now, I would like to clarify why survival is problematic, while it is important as it is the minimum performance (Schwartz, 2013); necessary, but not sufficient one could say. Some of the problems may be shared also with other indicators, other are proper of the survival rate:

- selection bias, as applicants are usually selected based on some criteria, it is possible that only the ones with lower risk of failure or higher chance of success are selected and therefore the effectiveness of incubators is not dependent on the incubators’ support (it is like helping someone that would have succeeded anyway), (also Hackett and Dilts (2004); Colombo and Delmastro (2002));

- endogeneity problem, as incubators are “meant” to keep tenants alive, they can act as “life-supports” for incubatees that would not be able to survive in a non-protected environment (also Phan et al. (2005));

- academic doubt, many academics found that using survival rate as a sole indicator is insufficient to capture success, for Phan et al. (2005) it should be paired with jobs and wealth creation and political, social, and economic objectives, and the interactions among them should be assessed, these may influence the attention given to survival per se and the end result would be a more precise and meaningful evaluation, based on broader outcome indicators including activities that are more likely to generate social returns or externalities for the region.

- lack of benchmarking values, there is no systematic database that can provide adequate benchmarking values (incubated firms vs non-incubated firms, between different types of incubators, etc.), and the fact that incubators are heterogeneous under many aspects, make the issue even more problematic. (Schwartz, 2013)

Regarding the actual effectiveness of incubators, there is still no consensus, partly because there is the aforementioned lack of benchmarking values and, in general, adequate control groups of firms are hard to come by (Hackett and Dilts, 2004), partly because different studies came to different conclusions (Lall et al. (2014); Auricchio et al. (2014); Schwartz (2013) even found that chances of survival were equal or less for tenants at a significant level), for Auricchio et al. (2014), this mismatch may be due to significant theoretical, methodological and empirical limits of the literature. An interesting result is reported by Hackett and Dilts (2004) (citing the results of Allen and McCluskey (1990)): more
than half of the variation in the survival rate was explained by the age of the incubator (a rough proxy for incubator’s development) and by the number of incubatees, therefore, organizational learning may be one of the most important variable for incubating new enterprises.

Lall et al. (2014) using a sample of 40 social accelerators/incubators find that older accelerators (founded before 2008) were no better in terms of survival rate, while they were in terms of enterprise success (in their study defined as operating at profitable level or having raised an investment of at least 500,000 dollars), differences in the funding structure and direct funding did not produce significant differences, while selectivity produced significant differences for both the variables (maybe due to selection bias).

Colombo and Delmastro (2002) confronted 45 incubatees with a control group of the same dimensions and concluded that there was not a significant difference in the innovation output (number of patents was used), but incubatees had better performances in job creation, attracted better educated workforce and were more apt in participating in European projects, in developing relationships finalized at collaborations, in adopting new technologies and in internalizing the research and development output of research centers.

Barbero et al. (2012) through a study with seventy Spanish incubators (surveys at the incubators’ management level) tried to understand if different types of incubator (already presented in the relevant section: basic research, university, economic development and private incubator) have a different effectiveness, they made this effort because they supposed that while different incubators have different objectives, incubators of the same type may have enough similar goals. The first result shows how only five indicators over nine have significant (at 0.05 or 0.01 level) differences between types (in figure 3.28, boxed).

Regarding the participation in research and development programs (and the subsequent funding), university incubators lead the way, followed by economic development, basic

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**Figure 3.28:** Barbero et al. (2012, p. 896)
research and private ones. The authors think that it may depend on the fact that participating in such programs is a long process and one must also be up-to-date with all the subsidies available, calls and requirements, these things are usually done by technology transfer offices in an efficient way, private incubators may prefer private capital markets, while basic research one often lack the technical skills needed.

Regarding the research and development investment, university incubators lead the way, again, probably it is linked with the participation in research and development programs, basic and private incubators rank lower, but with good values, while economic development ones have near null expenditure.

Regarding the presence of qualified scientists and engineers (QSE), private incubators fare better (even if the difference is significant at the 0.1 level only for basic and economic development incubators), the authors propose that this happen because they have greater resources to attract and retain top-talents, but one could have expected higher percentage for university and basic research incubators as university ones should have a great pool of QSE and basic ones should work in an environment with a high percentage of QSE.

The authors conclude that basic research and private incubators reach their objectives (develop new technologies and create values for shareholders), the former for the relevant investments in research and development, number of patents and new products and services, the last two are still valid for the latter, to which also sales growth is added; university incubators are good at acquire funding and talents, that does not translate in very good performances in new products/services creation or patents, therefore it is possible to say that they have only moderate success; the economic development incubators of the sample fail, as they have low ranks in each category.

Other performance measures (disregarding the ones already cited) that have been proposed (and sometimes tested) are the increase in cash flow and in assets, number of incubatees that had an initial public offering or were target of acquisition (Lall et al., 2014), incubator occupancy rate, number of new firms supported, graduated firm, level of funding received (Theodorakopoulou et al., 2014), others have developed complex models based on e.g. internal development, repercussion on the territory, human resources development, international and inter-regional relationships, but these models tend to be suitable for large set of cases due to their complexity (Barbero et al., 2012).

In general, measurement for incubators and in the social area appears problematic or not well developed, besides the problems cited until this point, there are others worth mentioning. Regarding the social area (considering also e.g. projects related to social innovation), there seems to be an insufficient culture of evaluation of results, and the development of tools for performances measurement is lagging behind the one of traditional
corporation (that, to be fair, have been present for a longer time) and the tools used are often success stories and anecdotal evidences, that while maybe effective, in the eyes of both the public and the investors, are not enough for a well-developed sector (Hubert et al., 2010). Taking in account the same area, while in the reporting some things, like jobs created, are consistently present, there is also much variation, partly because different organizations tend to have different missions, partly because there is no consensus on how to measure the success of a social venture (this first part is also valid for traditional incubators Bergek and Norrman (2008); Vanderstraeten and Matthyssens (2010); Theodorakopoulos et al. (2014)), there are, also, the issues of considering the depth versus the breadth of the impact, that is to say quality versus quantity, of using number for qualitative results, and the consequent risk of focusing on short-term proxies, instead than on the true goals (Casasnovas and Bruno, 2013).

Lall et al. (2014), with their study, shed some light on other practices (figure 3.29): in their sample of social incubators/accelerators, 4 per cent did not collect any financial data, while a much higher value of 28 per cent did not collect social and environmental data from the incubatees; moreover, there was a 14 per cent of the former and a 15 per cent of the latter that collected data only at the end or at the start of the program, the problem is that there is no way to detect a change as a result of the program. Additionally, regarding reporting after graduation, only 33 per cent of the incubators required reporting until the venture was operational and only 23 per cent for a “long” period of time (two to five years), while 28 per cent considered reporting completely optional. The authors also noticed the presence of a wide array of methods of collection of the data, and considered it a risk for obtaining reliable and unbiased data.

Now, I want to present a non-exhaustive list of the most important solutions for performance measurement for social businesses and projects. But first, I would like to show the guidelines summarized by Hubert et al. (2014, p. 27) that, while general and brief by construction, raise some points that deserve attention (first the process for creating a performance measurement system, then some comments):

1. identify objectives;

2. identify stakeholders;

3. set relevant measurement;

4. measure, validate and value;

5. report, learn and improve.
Figure 3.29: Lall et al. (2014, p. 18)
All stages should involve active stakeholder engagement. In particular, the number and range of indicators should be agreed between the social enterprise, beneficiaries or service users as well as investors, allowing for lighter and cheaper processes for small ventures. The dynamics of involving all stakeholders (from investors to service users) is designed to maintain the balance between the overriding need to deliver measurable social impact and the need for a profitable operation that can meet investor expectations (Hubert et al., 2014, p. 27).

First, it is good to cite two initiatives: the Impact Reporting & Investment Standards (IRIS) is a catalog of performance metrics that are generally accepted, the Global Reporting Initiative (GRI) offers guidelines to help organizations report and communicate their most critical impacts, these initiatives are useful to facilitate transparency, credibility and accountability in the area of impact measurement, and also to make more informed decision-making regarding impact.

In order to operate a division between the next few methods of impact measurement, I will use the one of Irene et al. (2016, p. 8,10,12):

- synthetic measures, the first group of models includes approaches that lead to the calculation of a synthetic indicator metric to provide a measure of the global performance of a social organization. These approaches focus on the final outcome of a social business organization;

- process-based models, the second group of models focuses on the process of “production” of a social service/product, articulating indicators and metrics into inputs-outputs-outcomes and impacts;

- dashboards and scorecards, the third group of models includes dashboards and scorecards aimed to identify a set of indicators and metrics to cover different performance dimensions, that are considered representative of the results of the social business organization. These models generally refer to the objectives of the organization itself and define a set of indicators covering different areas/performance dimensions.

In the first category, some tools can be found, for example:

- SROI (Social Return On Investment) is used to capture and monetize the social value created by the activities of an organization in many different sectors. The SROI is calculated dividing the [net present value of] social benefits that an organization creates by the relative cost of achieving those benefits (Calderini and Bengo, 2017, p. 39).

Carrying out an SROI analysis involves six stages:
1. Establishing scope and identifying key stakeholders. [...] 

2. Mapping outcomes. Through engaging with your stakeholders you will develop an impact map, or theory of change, which shows the relationship between inputs, outputs and outcomes.

3. Evidencing outcomes and giving them a value. [...] 

4. Establishing impact. Having collected evidence on outcomes and monetised them, those aspects of change that would have happened anyway or are a result of other factors are eliminated from consideration.

5. Calculating the SROI. This stage involves adding up all the benefits, subtracting any negatives and comparing the result to the investment. [...] 

6. Reporting, using and embedding. Easily forgotten, this vital last step involves sharing findings with stakeholders and responding to them, embedding good outcomes processes and verification of the report. 

(Calderini and Bengo, 2017, p. 40) 

Strengths and weaknesses are reported in figure 3.30. 

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robust method</td>
<td>Complex method</td>
</tr>
<tr>
<td>Complete methodology</td>
<td>Costly in terms of time and specialist skills</td>
</tr>
<tr>
<td>Stakeholder involvement</td>
<td>Difficulty in obtaining data and difficulties in the calculation of attribution effects</td>
</tr>
<tr>
<td>Activities and resources definition</td>
<td>Difficulty in understanding how and why impacts occur</td>
</tr>
<tr>
<td>Easily comparable between same sector organizations</td>
<td>Scarcely comparable between different sector organizations</td>
</tr>
<tr>
<td>Social value expressed in economic terms</td>
<td>Difficulty in attributing a financial dimension to soft, qualitative and subjective outcomes</td>
</tr>
</tbody>
</table>

*Figure 3.30:* Calderini and Bengo (2017, p. 42) 

- LM3 (Local Multiplier 3) is based on the concept that an economic multiplier effect describes the impact that spending has in the economy, taking into consideration the knock-on effects. The “multiplier” is an economic concept: a higher proportion of money re-spent in the local economy means a higher multiplier effect because more income is generated for local people. More income retained locally, or nationally, means more jobs, higher pay and more tax revenue for government, all of which
may lead to better living standards (Calderini and Bengo, 2017, p. 43).

The measuring process is articulated into three steps:

1. identifying a source of income;
2. following how it is spent;
3. following how it is re-spent within a defined geographic area (local economy).

(Calderini and Bengo, 2017, p. 44)

Strengths and weaknesses are reported in figure 3.31.

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robust method</td>
<td>It requires knowledge of the multiplier factors</td>
</tr>
<tr>
<td>Complete methodology</td>
<td>It requires the use of many resources</td>
</tr>
<tr>
<td>Stakeholder involvement</td>
<td>Cultural resistance of stakeholder about data disclosure</td>
</tr>
<tr>
<td>Useful to understand the effectiveness of expenditures</td>
<td>Difficulties in data collection process</td>
</tr>
</tbody>
</table>

(Figure 3.31: Calderini and Bengo (2017, p. 45)

In the second category, some tools can be found, for example:

- **MIAA (Methodology for Impact Analysis and Assessment)** considers the theory of change referring to the impact chain, that starts with a breakdown of activities, mapping what inputs it is using, how these activities produce outputs, which in turn lead to outcomes.

  MIAA comprises two main dimensions of analysis:

  - confidence that looks at the financial and operational performance of an organization;
  - impact that focuses on the social and environmental benefits.

  (Calderini and Bengo, 2017, p. 46)

  Strengths and weaknesses are reported in figure 3.32.

- **SIA (Social Impact Assessment)** is an instrument for identifying, measuring and reporting the social impacts generated by social enterprises, limiting the analysis to the three priority results that the organization wants to achieve.

  There are three steps to the Social Impact Assessment:
1. DEFINE. Define the organization social value proposition. [...] Describe why the ventures activities will lead to the ultimate desired outcomes. [...] Describe how the ventures activities will lead to the desired outcomes.

2. QUANTIFY. Identify three measurable social impact indicators that will most strongly correlate with the desired social outcomes. Selection of social impact indicators from the Impact Reporting and Investment Standards (IRIS) is encouraged.

3. TRACK. Explain how the chosen indicators will be tracked as part of the ventures ongoing business operations. Outline a clear and feasible plan for impact measurement and evaluation, including ongoing monitoring of unintended and/or negative consequences of the business.

(Calderini and Bengo, 2017, p. 49)

Strengths and weaknesses are reported in figure 3.33.

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linear and well defined methodology</td>
<td>Involvement of an external analysis team</td>
</tr>
<tr>
<td>Stakeholder involvement</td>
<td>Available data about [the] organization</td>
</tr>
<tr>
<td>The framework offers a series of indicators that reflect the peculiarities of the SE [social enterprise]</td>
<td>Lack of sector specific benchmarks</td>
</tr>
</tbody>
</table>

(Figure 3.32: Calderini and Bengo (2017, p. 48)

In the third category, some tools can be found, for example:

- Balanced scorecard generally refers to the objectives of the organization itself and define a set of indicators covering different areas/performace dimensions. Several
adaptations of the Balanced Scorecard proposed by Kaplan and Norton in 1996 have been proposed for measuring social impact and making the original model more adherent to the social business paradigm. Bull [in 2007], again adapting the model to the context of social enterprises, partially modifies the original perspectives (Calderini and Bengo, 2017, p. 53).

How were they modified?

- “Return: The Multi Bottom Line”. [...] The essence of this section focuses on social, environment and financial sustainability;

- “A Learning Organisation”. This section explores the social capital and knowledge of organisations.[...];

- “The Stakeholder Environment”. This section was renamed to replace the “customer” section in the BSC [balanced scorecard] as the term “stakeholder” is more representative of social enterprise, where many firms serve and satisfy multiple groups of people (e.g. end users, funders, communities...);

- “Internal Activities”. This section was slightly changed from “internal business process” from the BSC to move away from processes, leaving it much more open as activities that are involved within businesses (e.g. internal communications, quality, management systems, flexibility...)

- “Visioning”. This is the last section in the model, which brings aspects within the tool together into a vision for a business. (Calderini and Bengo, 2017, p. 54)

Strengths and weaknesses are reported in figure 3.34.

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy method</td>
<td>Strong deployment of human and economic resources</td>
</tr>
<tr>
<td>Complete methodology</td>
<td>Difficulties in the application</td>
</tr>
<tr>
<td>Stakeholder involvement</td>
<td>Static framework and does not totally answer to the informative needs of different stakeholders</td>
</tr>
<tr>
<td>Definition of internal process</td>
<td>Indicators are hard to be measured</td>
</tr>
</tbody>
</table>

Figure 3.34: Calderini and Bengo (2017, p. 56)

- SIMPLE (Social IMpact for Local Economy) is a guideline for social impact measurement of social enterprises.
The Simple model combines elements of competitive analysis with the development of a performance measurement model, based on a five-steps approach. These steps help SE managers to conceptualize the impact problem; identify and prioritize impacts for measurement; develop appropriate impact measures; report impacts and integrate the results in management decision making and the culture of the organization (Calderini and Bengo, 2017, p. 57).

The five steps of the process:

1. “SCOPE-IT”. The conceptualization of the impact problem and objective;
2. “MAP-IT”. The identification and the prioritization of impacts;
3. “TRACK-IT”. The choice and the assignment of appropriate indicators to measure;
4. “TELL-IT”. The report of impacts;
5. “EMBED-IT”. The integration the results in management decision making and in the culture of the organization.

(Calderini and Bengo, 2017, p. 58)

Strengths and weaknesses are reported in figure 3.35.

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete methodology</td>
<td>Complex methodology</td>
</tr>
<tr>
<td>Practical framework</td>
<td>Indicators are hard to be measured</td>
</tr>
<tr>
<td>Stakeholder involvement</td>
<td>Involvement of an external analysis team</td>
</tr>
</tbody>
</table>

**Figure 3.35:** Calderini and Bengo (2017, p. 59)
Chapter 4

Methodology

The pre-analysis phase was subdivided into four main stages. First, researches have been carried out in order to identify incubators/accelerators operating in Italy. Subsequently, a database was created containing the information gathered regarding each individual organization identified. This stage was followed by the creation of a survey that was to be submitted to the aforementioned organizations, which were then contacted by e-mail and/or telephone. To be noticed: for simplicity, I will use the word “incubator” to describe both incubators, accelerators and later co-working spaces with managerial support.

4.1 List of Incubators

In the first stage, after reviewing the literature and coming up with our definition of social incubator/accelerator,

An organization that supports actively the process of creation and development of new innovative enterprises, predominantly with a significant social (including environmental) impact, through the direct or indirect provision of services and resources

lists previously created and contained in articles of specialized journals (Colombo and Delmastro, 2002; Grimaldi and Grandi, 2005; Von Zedtwitz and Grimaldi, 2006; Giordano et al., 2015) and websites about the topics of incubation and startups1 were consulted and integrated. In addition, with the intention of curbing the risk of excluding any new organization not contained in the aforementioned lists, an internet search was carried out using the “incubatore” and “acceleratore” keywords alongside the names of the various

1 http://www.ventureup.it/venture/incubatori-acceleratori/
https://www.economyup.it/startup/acceleratori-e-incubatori-dove-andare-per-far-nascere-un-impresa/
http://www.italiastartup.it/who-is-who/

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Italian regions. This stage of research has contributed to the emergence of a first critical issue, linked to the ambiguity of the incubation concept previously described in the literature analysis. Many sources, in fact, cited under the name of incubators entities that differed consistently from the characteristic features of incubators (even considering them in a broad way), for example, co-working spaces that offered no more than a working place or science/technology parks that did not include a business incubator inside them. In addition, some organizations turned out to be no longer active or did not show any sign that would make possible to consider them active. In the first case, they were excluded from the analysis, while in the second case they were temporarily included to examine their actual operativeness at the later stages of the research in which they were contacted for the survey.

4.2 The creation of the database

After the identification of the organizations, a wide variety of related information was collected. First, the data on telephone contacts and e-mail addresses and the number of incubated startups were retrieved from the incubators’ websites. It was noted if they were included in a science or technology park, if they were university incubators or certified incubators. Finally, the company name of each organization has been identified. This allowed to search for information on two databases (AIDA and Orbis), specifically on financial data (assets, revenues, profit). The purpose of these data collection was to determine which sub-group of incubators to contact for the survey. The initial idea was to evaluate the financial situation of the incubator (a proxy to understand if the incubator itself was active) and the number of incubated startups. The difficulties encountered at this stage were mainly two: first, the lack of clarity on the number of incubated startups, from the websites of most organizations there was not clarity between actually incubated organizations, those already graduated, and mature businesses supported; secondly, in the case of incubators operated by organizations whose activity was not only incubation, it was not possible to locate the revenue share specifically derived from the incubation activity. These factors have limited the comparability of the identified organizations, therefore, all incubators included in the generated list were contacted.

4.3 The creation of the survey

The survey was built starting from an analysis of the relevant literature on incubators, that allowed to have a more precise idea of the questions common in literature. Based on that and on the information needed to provide an answer to the research questions the
first version of the survey was drafted. In the development of the survey was involved a panel of experts (annex B) that helped refine the survey both in form and content. The survey had the aim of collecting data for the year 2016. The survey was built on the online platform SurveyMonkey in order to allow the collection of answers online, but at the same time a Microsoft Word version (annex A) with the same contents was developed in case there were any issues related to the use of the first variant. The survey was divided into six sections:

- data regarding company name, year of foundation and number of employees (full-time equivalent);
- activities and services offered to incubatees. The list, consisting of ten possible alternatives, was created starting from the literature concerning the services traditionally offered by incubators. The respondent was asked to state whether she offered these services and, if so, whether they were available to all incubatees, to many of them or, only, to some of them;
- number of incubated organizations and applications received. It was, also, asked to break down the incubated organizations on the basis of the type of company: for profit, non-profit or hybrid. Hybrid organizations are intended as for-profit organizations that have explicit social or environmental objectives among their goals (e.g. “startup innovativa a vocazione sociale”, “impresa sociale”, “B-corp”, etc.);
- information on the businesses with significant social impact incubated (if applicable), including their number and the sector in which they operated from a list of eleven options derived from the literature (multiple answers were possible);
- information on funding obtained by the incubatees, whether the incubator invested capital in the incubatees and information regarding the developing/involving of a community around the incubator;
- financial data related to the division of costs and revenues of the incubators.

The final page included the request of the list of incubated organizations in 2016.

4.4 Administration of the survey

E-mails containing the link to the survey were sent from the 22nd to 23rd of July 2017 to one-hundred and fifty-eight organizations via an e-mail address created ad hoc for the study. Reminder e-mails were sent in August and September, when no answer was
recorded. In this case, the Microsoft Word version of the survey was also attached. In addition, incubators were contacted by phone to resolve any doubts in compiling the survey or answer inquiries regarding the study and the use of the information provided. Incubators were also contacted by e-mail or phone in case there was the need of confirmation for some data. The data collection closure was initially scheduled for September the 15th, but this deadline was extended to October the 13th to allow other organizations, contacted on a later date to answer. Among these organizations there were co-working spaces, the ratio behind this choice stemmed from the ambiguity around words like “incubator”, “accelerator” and “co-working space” and it was to not exclude organizations that, while did not define themselves as incubators, offered incubation-like services. Specifically, the co-working spaces contacted were seventy-eight.

4.5 Data cleaning

After the closure of the survey, an intense data cleaning phase began. Data from SurveyMonkey and from the Microsoft Word version of the survey were moved to a Microsoft Excel file. The data checking included:

- elimination of multiple answers (when the same organization left incomplete answers before providing a final complete answer);
- transformation of data in a common and suitable format (e.g. transform numeric values written in words in a common numeric format);
- check for incomplete data, noise and inconsistency. These causes of low quality of data were actively addressed and when possible were solved in both direct (contacting the respondent) and indirect way (searching for other information that could clear doubts) and often double checking direct and indirect sources. If a solution was not possible, the data were disregarded for the relevant analysis.

4.6 Data analysis

4.6.1 Organizations contacted and accepted answers

Regarding the accepted answers, there are the ones of incubators, accelerators and co-working spaces that provide managerial support, this according to the definition adopted and the literature presented in the first chapter, that says that the line between incubators, accelerators and co-working spaces is not always neat, even more when the organization is “social”, and that is valid also in Italy. As can be seen in figure 4.1, the number of
organizations contacted was of one hundred and seventy-nine, and the number of accepted answers was eighty-seven with a rate of response of about 49 per cent.

To add some detail, the co-working spaces included were the ones that answered the survey and said to provide managerial support, the others were not included, moreover, different organizations that appeared under the same tax code ("partita iva") were considered only once. From now on, I will use only the terms “incubator” and “incubation” for simplicity.

4.6.2 Incubator’s typologies

In order to compare incubators that support mainly social businesses to the ones that support also social businesses and the ones that, instead, do not, answers were divided in typologies (in fact in the survey they were asked both the number of organizations incubated and the number of social businesses incubated):

- Business Incubators, number of organizations with a significant social impact incubated equal to zero;
- Mixed Incubators, number of organizations with a significant social impact incubated between one and the 50 per cent (values are rounded);
- Social Incubators, number of organizations with a significant social impact incubated between 51 and 100 per cent (values are rounded).

The summary table can be found in figure 4.2. The total is not equal to the one presented in the previous section as some missing data prevented the assignment to typologies (these records were, therefore, not considered in the comparative analysis between typologies).
First, data were analyzed in a visual way through the use of map charts, bar charts, radar charts. The initial analysis included also histograms, observations based on the average and median values and on standard deviation, cumulative sum charts and comparisons with previous studies.

Second, an econometric analysis was carried out, using both data from the survey and data collected through AIDA (on the startups which names were requested to the incubators).

The names of incubated organizations collected were 539, 423 of which were already formed firms present in the database AIDA. The decision was to consider only enterprises founded from 2011 and onward, this limit was imposed to try to focus the analysis on new businesses, moreover, five years is the limit that the law on innovative startup in Italy declares for a startup to be considered as such. In the literature, taking into account average incubation times, law disposition and academic advice, depending on the country, generally incubation time is between two and seven years. E.g. 3-5 years, regarding exit policies (Bergek and Normman, 2008), 3.5 years, regarding average age of incubatees (Casasnovas and Bruno, 2013), 3 years, regarding graduation, 1-2-7 years, regarding the average age in different types of incubators (Bruneel et al., 2012), 4 years, regarding graduation (Phan et al., 2005), 3 years, regarding average permanence in USA, 3-7 regarding average permanence in Germany (Aernoudt, 2004).

The choice for the dependent variables (growth in employees and sales between 2015 and 2016) led to the exclusion of firms founded after 2015 and whose growth could not be computed.

Moreover, 3 records were eliminated as the links between the information available and the firms were incoherent.

For the firms founded in 2015 or not having information covering the whole twelve months

<table>
<thead>
<tr>
<th></th>
<th># of answers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business incubator</td>
<td>39</td>
<td>0.50</td>
</tr>
<tr>
<td>Mixed Incubator</td>
<td>30</td>
<td>0.38</td>
</tr>
<tr>
<td>Social Incubator</td>
<td>9</td>
<td>0.12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>78</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
of 2015, it was decided to exclude all records that did not have at least ten months of information available in order to make the various growth rates more comparable. The resulting databases were of 123 records for the employees’ growth and of 118 for the revenues’ growth.

The objective of the analysis was to evaluate the effect of different incubator typologies (business, social, mixed) on the performances embodied by the dependent variables, in order to do this, two dummy variables were created. Control variables were also added, specifically: the age of the incubator, the age of the startup, the geographic macro-region of the startup, the number of the employees of the startup in 2015 and 2016 (only for the revenues’ growth), the number of incubatees (2016), presence of the certification for the incubator, presence of direct financing.

First, correlations tables were made, then a linear regression, then taking into account that the dependent variables were censored (one cannot observe a decrease of more than 100 per cent) a Tobit model was used (the relevant tests that could be done, were made and raised no cause for concern). The software used was STATA. Specifically, both the regression and the Tobit model were done starting from a model containing only the dependent and independent variables, then the others were added if the adjusted R squared increased (for the Tobit, it was used the McFadden’s adjusted pseudo R squared, computed separately).
Chapter 5

Results

5.1 Preliminary overview

5.1.1 Diffusion of incubators on the Italian territory

In the first map (figure 5.1), it can be observed the geographical distribution of the incubators contacted. It can be noticed that all regions are represented and the one with the highest number of incubators by far is Lombardy. Divided by macro-region: North-West is on top with sixty-two incubators, followed by the Center (forty-four), the North East (thirty-nine) and the “Mezzogiorno” (thirty-four). In the second map (figure 5.2), it can be observed the geographical distribution of the incubators that answered. It can be noticed that, again, all regions are represented and the rate of response is a quite relevant value for every region. Divided by macro-region: North-West is on top with thirty-four incubators, followed by the North East (twenty), the Center (nineteen) and the “Mezzogiorno” (fourteen).

Moreover, twenty-five of the incubators that answered were “certified incubators” (thirty-four were present at the time of writing 06/11/2017).

5.1.2 Age of the incubators

It is evident from the chart (figure 5.3) that the incubators formation trend is growing, though not at a constant pace. Growth has occurred especially in recent years, in fact, it can be noticed a greater slope in the curve, and the median value is “2012”, meaning that at least half of the incubators were born until that year, while the rest were concentrated in the following years.

It is interesting to notice the peak in the year 2013: it may be due to the effect of “Decreto crescita 2.0” of 2012, that was already presented in a previous section.
In the next chart (figure 5.4), it is easy to see how the oldest incubators are either business incubators or mixed ones (it is fairly probable that mixed incubators started as business ones and later expanded their scope), while social incubators are concentrated in recent years. This is even more evident when looking at the average age of the incubators divided by typologies (figure 5.5), social incubators have around half the age of the others.

5.1.3 Incubators’ employees

In the next series of charts, I will consider the average number of employees (full time equivalent) of 2016 for each incubator.

From the chart (figure 5.6), it is clear that most incubators are small. This may be due to the fact that most incubators are quite young. Looking at the data more thoroughly and using the median found in the previous question, it can be noticed that incubators founded earlier have about double the employees of the younger ones (an outlier was not considered), around eight the former and around four the latter. Checking the standard deviation reveals that the first group has a standard deviation about four times the one of the second, around fifteen the former and around four the latter, that means that not all incubators have steady growth over time, but many remain small. These data differ from both Auricchio et al. (2014) (study on Italian incubators) and Lall et al. (2014) (study on
Figure 5.2: Geographic distribution of incubators’ answers

Figure 5.3: Number of incubators founded per year (aggregated data) n=87
social incubators), the average number of employees was sixteen for the former and eleven for the latter, but Auricchio et al. (2014) add that the 60 per cent of the respondents had less than eight employees and the 40 per cent less than four.

As seen from aggregated data, Italian incubators are for the most part small in size. However, the division in typologies gives interesting insights (figure 5.7): social incubators tend to be medium-to-small, the business ones seem to be more polarized between small and large dimensions, and the mixed incubators tend to have a more consistent presence in all dimensions. What could be the reason: more employees means having more available resources, therefore, profit and capital that are generally more easily obtainable when
there is a profit orientation, this reduces the possibilities of purely social incubators. Another important point is that the necessary skill-set needed to incubate social businesses overlaps only partially with what is needed for traditional businesses, leading to the need for more human resources (this is applied to mixed incubators).

Considering instead cumulative data, it is possible to see if the number of employees is polarized, i.e. if a small number of incubators has a great number of employees. It seems to be the case (figure 5.8), less than half of the incubators take around four fifth of the total employees population. If the disaggregated data are considered, it is possible to see some differences: business incubators have a slope steeper than average (figure 5.9), that indicates a high polarization, mixed incubators have a much milder slope (figure 5.10), while social incubators have an almost straight line (figure 5.11), indication of a non-existing or very limited polarization.
Figure 5.9: Incubators’ employees business (cumulative data) \( n=39 \)

Figure 5.10: Incubators’ employees mixed (cumulative data) \( n=29 \)
5.1.4 Applications received

This section is about the number of applications received by the incubators for their incubation programs or the likes. From the chart (figure 5.12), it is clear that most incubators receive a low volume of applications (less than fifty), with a considerable number that receives ten or less applications, but looking at the chart that gathers only the ones that receive more than one hundred applications (figure 5.13), it can be noticed that they are also a considerable number, and moreover that there are some incubators that receive vastly more application, indication of a polarized system even regarding the applications aspect. In fact, around the 30 per cent of incubators (the ones with more than one hundred applications) received around the 88 per cent of all applications. A similar polarization was found also by Auricchio et al. (2014).

The chart (figure 5.14) is extremely interesting for the diversity that the different typologies present. Business incubators tend to receive fewer applications with a little more than one fifth of incubators receiving more than one-hundred applications. Social incubators are better placed, although most receive only few applications, about the 40 per cent receives more than a hundred. Similar the situation of mixed incubators, where more than 40 per cent receives more than one hundred requests each year. Certainly, one of the reasons is that a mixed incubator is more capable of accepting startups from multiple sectors, thus increasing the pool of potential requests. When talking about applications received is appropriate to notice that startups seeking incubation may send more than
one application.

5.1.5 Incubated organizations

From the chart (figure 5.15), it can be easily seen that most incubators (around 81 per cent) have a small-to-medium (twenty or less) number of incubated organizations. Still, there is a non-negligible number of incubators that support more than twenty organizations and some of them peak at over one hundred. The polarization seen for employees and applications, here, is milder, in fact, around the 19 per cent of incubators (the ones with more than twenty tenants) gathers about the 57 per cent of incubatees. When looking at these numbers, it should be noted that it is possible that some organizations have
been incubated by more than one incubator during the 2016. Looking at roughly the same data divided in typologies, one can find some differences: for all typologies most incubators still support a small-to medium number of incubatees, for business incubators only around 8 per cent supports more, 10 per cent for mixed, but a 44 per cent for social. Moreover, while for mixed and social incubators that percentage of incubators accounted for the majority of population (around 63 per cent for the former and 74 per cent for the latter), for business incubators did not (around 27 per cent).

5.1.6 Services offered

In this section, I will examine the frequency with which some typologies of services are offered by incubators. As the possible answers to the survey question were of categorical type, they were transformed in percentages (figure 5.16) in order to improve the interpretability of results, therefore, when looking to results, it should be kept in mind that a decision between precision and interpretability has been operated.

In the first chart (figure 5.17), it is possible to see how networking is the service provided to most of the incubatees, it seems, therefore, that creating or giving opportunity
to create or facilitating a relationship is a distinctive trait of Italian incubators (here are considered both internal relationships e.g. with other tenants, and external ones e.g. with research centers, universities, public administrations, private firms, etc.). Among the ones provided to the great majority (more than 70 per cent), there are, also, access to finance (direct or indirect), physical space and shared services and managerial support (the latter includes mentoring and support to business plan creation, the development of the business model, internationalization, marketing and sales, etc.). These tend to be services commonly provided by incubators. Formation, while not among the less provided is neither among the most, it seems, therefore, that closing the gaps in business skills is not a priority. At lower ranks, there are support to technology development and scouting and IP (Intellectual Property) support, the position of these two categories of services may be linked to the fact that are useful only to a subset of the tenants and, therefore, may be provided mostly by incubators strongly linked, for example, to universities and research centers. Then, there are the administrative and legal services, these, while useful, especially for an organization with little experience, may be not considered core to the incubator and, therefore, be under-provided. The services provided to the lowest number of incubatees are the social impact measurement services and the formation/consulting on business ethics and CSR (Corporate Social Responsibility). It is a clear sign that this kind of services is still not diffused, and offer or demand (or both) is lacking.

Looking at the chart with data divided by typology of incubator (figure 5.18), networking is still among the higher ones, with a 95.5 per cent for mixed incubators and a much lower value for business incubators. The services that were highly provided in the aggregated data are still consistently provided by almost all typologies of incubators, interestingly, physical space and shared services is the most provided by business incubators, followed by access to finance. For social incubators, the situation is different as physical space and related services are provided to a little more than half of the incubatees. Formation seems to be particularly important for mixed incubators, in fact, the provision of the service
reaches the level of the ones just cited, for the same typology. Regarding the services that were not very much provided, the situation is the same, moreover business incubators are the larger provider of technology development and scouting support, while mixed ones of both IP managing support and administrative and legal services. Regarding the services related to the social aspect of business, the real difference is, obviously, in social incubators that reach around the 53 per cent for social impact measurement services and 40 per cent for formation and consulting on business ethics and CSR. While they show largely higher value than the other typologies of incubators, it is surprising that they are not higher as they are focused on the social dimension of businesses. It seems, therefore, that, while the attention for the social dimension is growing, the road for a real integration of it in the culture is long.

5.1.7 Typologies of incubatees

It is clear from the chart (figure 5.19) that incubated organizations are largely for-profit. This, obviously, does not mean that they do not have a positive social impact, but only that is not predominant in the organization. Hybrid organizations are intended as for-profit organizations that have explicit social or environmental objectives among their
Figure 5.18: Provision of services by category $n=78$
goals (e.g. “startup innovativa a vocazione sociale”, “impresa sociale”, “B-corp”, etc.). The results that can be seen from the next chart (figure 5.20) are not unexpected: business incubators have a vast majority of for-profit companies, the social ones are the highest regarding hybrid and non-profit enterprises, while the mixed ones are polarized on for-profit. On the one hand, one must remember that in order to work on “social” challenges or to have a significant and positive social impact, it is not necessary to be a hybrid or non-profit organization. On the other hand, it should be noted that some incubators have specific programs or calls for social enterprises (so they are only a small part of the incubatees), and that large and unfocused incubators may have in the portfolio some social enterprises that have simply passed their selection process.

5.1.8 Funding received by incubatees

The first chart (figure 5.21) is about the funding received by the incubatees in 2016, the value refers to the cumulative value of funding, taking into consideration all the incubatees of a specific incubator. The incubatees of a relevant number of incubators seem to have gathered a quite low amount of funding, but it is also possible to observe that the incubatees of a non-negligible number of incubators received much more funding. It seems that, also, here there is a small group that obtain the majority of funding, and values like the average (around 1465 million(M)€) and median (around 250 thousand(k)€) are not meaningful. Looking more in depth, it is easy to see how around the 9 per cent of incubators (the ones that collected more than 3 M€) collected about the 72 per cent of
Looking instead at the second chart (figure 5.22), it is possible to see that business incubators tend to be concentrated in the lower part of the spectrum, while mixed incubators are the only ones with more than five millions in cumulative funding. At this point, it may be interesting to take into account the number of incubatees of each incubator and relate it to the funding declared, in order to obtain an average value and observe if something changes in the charts. In the chart (figure 5.23), it can be seen that the incubatees of the majority of incubators (around the 83 per cent) have an average value of less than 100 k€, while only two have and average value of more than 1 M€.

Looking instead at the chart with data divided by typology (figure 5.24), it is possible to see how mixed incubators have no more the exclusive on the higher part of the spectrum, while having larger presence in the mid-high part, on top there are one business and on social incubator, but it is important to notice how most of them, especially the social ones, are more concentrated in the lower part of the spectrum.

Concentrating more about the direct investments of incubators in their incubatees, in particular if they do them, there is the next chart (figure 5.25). Evidently, it is not a common practice, but it cannot be said that is not present or nearly not present.

Looking at the situation through the lens of typologies (figure 5.26), it is possible to see that there is not a great change, but mixed incubators seem the ones that provide capital
Figure 5.21: Level of funding received by incubatees (cumulative by incubator, aggregated data) $n=66$

Figure 5.22: Level of funding received by incubatees (cumulative by incubator) $n=60$

Figure 5.23: Level of funding received by incubatees (average by incubator, aggregated data) $n=66$
Figure 5.24: Level of funding received by incubatees (average by incubator) \( n=60 \)

Figure 5.25: Presence of direct investments by the incubators (aggregated data) \( n=84 \)
more often.

5.1.9 Community

The questions of this section want to take a glimpse on the community around the incubators, considering both the population of the area and the community composed by like-minded people. The efforts in creating a community, involving external actors can be seen as a measure of the openness of the incubator. The first chart (figure 5.27) shows an overwhelming majority of incubators that organize events opened not only to tenants, but also to others, in particular from the second chart (figure 5.28), it is possible to see how the totality of mixed and social incubators do this activity. The difference between business incubators and the others can be seen even more when looking at the next chart (figure 5.29). Mixed and social incubators seem to be more interested in creating a community as around the 93 per cent and 89 per cent of them, respectively, make additional efforts to create it.

In general, it can be said that Italian incubators have a quite open attitude, and the ideas of incubators as more than a “structure” and incubators as tools to increase public knowledge and awareness e.g. on entrepreneurship gain weight.

5.1.10 Incubators’ costs

From the chart (figure 5.30), it is possible to see that the larger share of the costs is absorbed by the ones related to the management of the structure and to generic services, while the second highest cost item (close by) is the managerial and technical supporting services. The one who gets much less attention is training (considering aggregated data, it
Figure 5.27: Organization of events open to non-tenants (aggregated data) n=84

Figure 5.28: Organization of events open to non-tenants n=78
was not among the most provided services). It can be concluded that managing a physical structure absorbs many resources that cannot be otherwise invested in the provision of services with a higher knowledge content. Auricchio et al. (2014) also found that facilities and consulting services were the top costs (even if with slightly different percentages: 47 per cent for the former and 29 per cent for the latter).

The data divided by typologies offer an interesting view (figure 5.31): for business incubators the larger cost, by far, is the one for the structure and related services, while for the social ones is much lower, this seems to mimic the offer of such services (they were the most provided services for business incubators, while values for the social ones was far below the other typologies). Regarding the managerial and technical support, the situation is opposite, social incubators spend most in this category, while business incubators are the ones who spend less. Training is still the one with lower spending (even for mixed incubators who tended to provide the service more than the others), but it seems to be more important for mixed and social incubators. All things considered, business incubators seem to be leaning toward the provision of more “physical” services, while mixed and social incubators lean toward the provision of services with a higher knowledge content. Moreover, the latter seems to have a quite high share of cost in other services, it would be interesting to explore this further and see if it can be linked to a single category of services.
**Figure 5.30:** Incubators’ costs (aggregated data) $n=71$

**Figure 5.31:** Incubators’ costs $n=66$
5.1.11 Incubators’ revenues

As can be seen from the chart (figure 5.32), rent revenues are still the largest source of support for Italian incubators. Although not negligible, revenues from activities closely linked to incubation, i.e. services provided to the incubatees and investments in the incubatees (e.g. revenues coming from having or selling equity) is lower, in fact, services are only the third highest source of income. In the second position, it is possible to see revenues derived from incubator activities that are not strictly linked to incubation (e.g. consulting contracts), this does not mean that there is no connection between these activities and incubation, for example the incubator may use the network and expertise acquired with incubation to perform them. This may be a sign that incubators, in order to be self-sustainable, try to diversify their activities. Finally, a significant, but not overwhelming, part of the funds comes from the public and donations, it is a sign that state “aid” and aid in general are still a key part of the Italian incubation system. To be fair, the situation seems better than the one described by both Auricchio et al. (2014) and Lall et al. (2014), for the former the 41 per cent of costs were not covered by incubators’ revenue (assuming that the incubators in the sample studied here cover their costs), for the latter the 74 per cent of incubators relied on philanthropy for the 54 per cent of funding.

The data divided by typology give some information more (figure 5.33), given what has
been said before, it is not surprising that business incubators have the largest share of their revenues coming from rent, while social ones have a much lower share. Unsurprising, it is also the result for the services, given what was said regarding the costs. Investments are quite baffling, instead, but the chart can be misleading: on one hand, business incubators may not be for-profit, and, therefore, may be less interested in revenues from investments, on the other hand, the 15 per cent of social incubators is influenced by a single organization that relies completely on investments’ revenues, otherwise the value would be around 3 per cent. Mixed incubators seem to have a relative large share of their revenues from subsidies and tenders, therefore, mainly from the public sector. It would be interesting to understand, in the future, from where exactly donations for business incubators come from, for now it is only possible to speculate (e.g. if an incubator has the goal of fostering local entrepreneurship, it may be helped by locals with the means, or by firms that want to reinforce their link with the community).

5.1.12 Mixed and social incubators

In this section, there are the results of the part of the survey exclusive to incubators that supported social businesses (and “incubatees” refers to them).

In the first chart (figure 5.34), it is possible to see how mixed incubators tend to support only a limited number of social businesses, this gives some more information on a previous
chart (regarding the typology of incubatees) and confirms that mixed incubators tend to host mostly for-profit companies with no social scope.

The second chart (figure 5.35) is about the sectors in which the incubatees work, it was possible to select multiple sectors for each incubatee, therefore, the chart can be interpreted as the “coverage” received by each sector. Social incubators have a large predominance of organizations that can be described as working in the field of culture, arts and crafts, while areas such as sustainable finance and consumer protection and poverty and social exclusion tend to be underrepresented, with peace and justice even without representation. Other sectors can be considered “similarly” represented. The mixed ones, on the other hand, offer greater coverage to the health and well-being sector (it could be linked to the biomedical sector), followed by environmental protection and social tourism and responsible consumption, while, with virtually no representation, there are still peace and justice and poverty and social exclusion.

The next chart (figure 5.36) is about the provision of services specifically targeted to social businesses (e.g. access to ad hoc financial instruments). Not many mixed incubators provide these services, this may be linked to the fact that they usually host a limited number of social businesses. Instead, more than half of social incubators provide them, but why the other half does not is an important question, as they should be focused on social businesses. It could be that having mostly social businesses they do not consider the services as “specific”, but this may be a stretch, or could be the same reasoning made when talking about the provision of training/consulting on business ethics and CSR and social impact measurement services, or maybe there are not specific services, but “mainstream” services are tweaked for the needs of social businesses. It is clear that this topic deserves more attention in the future.
Figure 5.35: Sectors covered $n=38$

Figure 5.36: Provision of services specific to social businesses $n=39$
The next chart (figure 5.37, it was possible to select more than one answer) is about the problems that incubators found in incubating social businesses. From the chart, one can see how social incubators find relevant the issue of not having enough financial returns from their incubatees, which could endanger the sustainability of the incubator. It would be interesting to explore in subsequent studies if this is because incubated organizations do not use much of the incubator’s services (as seen in the literature), by a hypothetical lack of profitability or difficulty in making an exit or something else. It is important to notice that for mixed incubators this is the least felt problem, social businesses are in fact less and generally for-profit or hybrid. A major problem, and the most relevant to mixed incubators, is the difficulty in finding funding for incubatees. In the literature, this problem often depends on the fact that “graduate” companies do not reflect the level the investors want from them, as they prefer mature and ready-to-scale organizations on which investing large capitals. Another interesting point is the relevance of having different objectives and languages. This could result from a clash between profit, nonprofit and hybrid mentality. The high percentage in the “other” category, especially for the social, raises an interesting point: there are many difficulties that are present, though they do not stand out. In a subsequent research, it would be interesting to ask what these problems are and especially to find out if they remain consistent between all incubators or are, instead, a plethora of different problems related to the specifics of each incubator. Finally, it is good to remember that the percentage of those who have not found difficulties, especially among the mixed ones, is not negligible and this is good for the future of social entrepreneurship.

This chart (figure 5.38) is about the practice of measuring, in some ways, the impact of the incubatees. It can be linked partly to the one related to specific services: although, impact assessment is fundamental to anyone who pursues or has a social impact, most incubators do not do it. This is particularly true for mixed incubators, while social ones have a smaller, but still relevant, percentage.

5.1.13 Reasons for not incubating social businesses

The answers of the next chart (figure 5.39, it was possible to select more than one answer) are the ones of who does not incubate social businesses. It seems that the most relevant problems are the mission of the incubator and the fact that there were no relevant applications from aspirant social businesses, therefore, the lack of support to social businesses does not seem to be connected with the problems that may afflict social business, but more to an incompatibility with the mission of the incubator and to an “inadequacy” of the applicants (one may argue that the offer and the selection process of an organization,
Figure 5.37: Difficulties in supporting social businesses $n=39$

Figure 5.38: Measuring of the impact of incubatees $n=39$
are tailored to the objective of the organization, and may not take in account the peculiarities of the application). To be fair, it is also possible that these incubators do not really know social businesses.

### 5.1.14 Startups data: incubators’ profile

In this section, I will give a brief description of the thirty-one organizations that provided the names of their 2016 incubatees. As can be seen from the first figure (figure 5.40), the percentage of incubators that sent the list divided by each macro-region (Nort-West, North-East, Center and Mezzogiorno that is composed by South and Insular) is similar to the one of the incubators in the sample, with the largest gap in the Center macro-region (around 7 per cent).

The difference between the two groups is even less when looking at the typologies of incubator (figure 5.41): more or less there is the same percentage of business, social and mixed incubators between total answers and only the ones that sent the list. In figure 5.42, it can be seen that the incubators in the sample are somewhat younger and smaller (both considering the average and the median value) than the ones who sent the list. Moreover, the latter group has a higher percentage of certified incubators (around 35 per cent) than the former group (around 28 per cent).
**Figure 5.40:** Comparison of distributions in macro-region

**Figure 5.41:** Comparison of distributions in typologies of incubator
5.1.15 Startups data: Startups’ profile

As can be seen from the first figure (figure 5.43), taking in consideration all the organizations found in AIDA, Lombardy seems to be the region that welcomes more firms (to be fair most of the lists arrived from incubators in the North-West macro-region), but it can be seen how there are more or less “active” regions.

Evidently (figure 5.44), the limited liability company (“S.R.L.”) is by far the preferred legal form. It can be seen from the figure 5.45 that more than 90 per cent of firms work in four sectors. Moving to the databases used for the analysis of the startups, the first one is the one used for the variable revenues’ growth, in figure 5.46 some quick facts about the database can be seen, moreover it can be said that around 95 per cent of the organizations had “S.R.L.” as legal form. As can be seen from the first figure (figure 5.47), Lombardy seems to be, again, the region that welcomes more firms, with the other regions showing much less activity. The first three sectors in which incubatees work are the same of the unfiltered sample (with similar percentages), collecting around the 86 per cent of the sample (figure 5.48). Looking instead at the database used for the employees’ growth, data are quite similar, as they should be as the two databases are mostly coinciding. Therefore, the figures have been relegated to the annex C (again around 95 per cent of startups had “S.R.L.” as legal form).
**Figure 5.43:** Distribution of firms by region

**Figure 5.44:** Legal form adopted by firms
Figure 5.45: Firms' sectors

<table>
<thead>
<tr>
<th>Ateneo code</th>
<th>Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>J</td>
<td>SERVIZI DI INFORMAZIONE E COMUNICAZIONE</td>
</tr>
<tr>
<td>M</td>
<td>ATTIVITÀ PROFESSIONALI, SCIENTIFICHE E TECNICHE</td>
</tr>
<tr>
<td>C</td>
<td>ATTIVITÀ MANIFATTURIERE</td>
</tr>
<tr>
<td>G</td>
<td>COMMERCIO ALL'INGROSSO E AL DETTAGLIO, RIPARAZIONE DI AUTOVEICOLI E MOTOCONI</td>
</tr>
<tr>
<td>N</td>
<td>NOTELEGGIO, AGENZIE DI VIAGGIO, SERVIZI DI SUPPORTO ALLE IMPRESE</td>
</tr>
<tr>
<td>B</td>
<td>ATTIVITÀ ARTISTICHE, SPORTIVE, DI INTRATTENIMENTO E DIVERTIMENTO</td>
</tr>
<tr>
<td>O</td>
<td>SAPRITI E ASSISTENZA SOCIALE</td>
</tr>
<tr>
<td>P</td>
<td>ISTRUZIONE</td>
</tr>
<tr>
<td>E</td>
<td>COSTRUZIONE</td>
</tr>
<tr>
<td>A</td>
<td>AGRICOLTURA, SAVICOLTURA E PESCA</td>
</tr>
<tr>
<td>H</td>
<td>TRASPORTO E MAGAZZINAGGIO</td>
</tr>
<tr>
<td>I</td>
<td>ATTIVITÀ DEI SERVIZI DI ALLOGGIO E DI RISTORAZIONE</td>
</tr>
<tr>
<td>S</td>
<td>ALTRE ATTIVITÀ DI SERVIZI</td>
</tr>
<tr>
<td>E</td>
<td>FORNITURA DI ACQUA, RETI FOGNARIE, ATTIVITÀ DI GESTIONE DEI RIFIUTI E RISANAMENTO</td>
</tr>
<tr>
<td>K</td>
<td>ATTIVITÀ FINANZIARIE E ASSICURATIVE</td>
</tr>
</tbody>
</table>

Figure 5.46: Startups’ Quick Facts (revenues’ growth database)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Revenue 2016</th>
<th>Revenue 2015</th>
<th>Revenue Growth</th>
<th>Employees 2016</th>
<th>Employees 2015</th>
<th>Employees Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>€ 193,439.47</td>
<td>€ 122,776.99</td>
<td>192.8%</td>
<td>3.4</td>
<td>2.2</td>
<td>49.8%</td>
</tr>
<tr>
<td>Median</td>
<td>€ 56,887.50</td>
<td>€ 51,698.50</td>
<td>9.8%</td>
<td>1.0</td>
<td>1.0</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Figure 5.47: Distribution of startups by region (revenues’ growth database)
5.2 Econometric analysis

The name of the variables used and the respective meaning can be found in the following figure (5.49). From the correlation table (figure 5.50), it can be seen that the incubator’s age, startup’s age and direct financing are significantly (0.05 level) correlated with the revenues’ growth. High correlations (more than 0.5 in absolute value) are present between the variables “M\text{inc}” and “B\text{inc}”, two dummy variables and “dip\text{15}” and “dip\text{16}”, quite obviously, there is also one between the presence of certification and the number of incubatees, it seems that certified incubators tend to have more incubatees.

Looking, instead, at the other correlation table (figure 5.51), it seems that the only variable correlated with employees’ growth is “S\text{inc}”. High correlations are found between the same variables as before, plus between “area\text{NO}” and “area\text{NE}” other two dummy variables whose correlation slightly grows.

The best result with the regression (revenues’ growth) was obtained with the variables age of the startup and direct financing (figure 5.52). The coefficients of the model are not all simultaneously zero with high probability. The variance explained is quite low, around 9 per cent. Both the age of the startup and direct financing result significant (one at 0.05 level and the other at a weaker 0.1 level). The confidence interval for direct financing includes zero therefore it is not possible to reject the null hypothesis. The only variable remaining is, therefore, the age of the startup and it seems to have a negative effect on
### Figure 5.49: List of variables for the econometric analysis

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Meaning</th>
<th>Variable category</th>
</tr>
</thead>
<tbody>
<tr>
<td>rev_change</td>
<td>Revenues' growth between 2015 and 2016</td>
<td></td>
</tr>
<tr>
<td>emp_change_m</td>
<td>Employees' growth between 2015 and 2016</td>
<td></td>
</tr>
<tr>
<td>B_inc</td>
<td>Dummy: Business incubator</td>
<td>Independent variables</td>
</tr>
<tr>
<td>S_inc</td>
<td>Dummy: Social incubator</td>
<td></td>
</tr>
<tr>
<td>M_inc</td>
<td>Dummy: Mixed incubator</td>
<td></td>
</tr>
<tr>
<td>inc_age</td>
<td>Incubator's age</td>
<td></td>
</tr>
<tr>
<td>sta_age</td>
<td>Startup's age</td>
<td></td>
</tr>
<tr>
<td>area_NO</td>
<td>Dummy: Startup located in the North-West macro-region</td>
<td>Control variables</td>
</tr>
<tr>
<td>area_NE</td>
<td>Dummy: Startup located in the North-East macro-region</td>
<td></td>
</tr>
<tr>
<td>area_C</td>
<td>Dummy: Startup located in the Center macro-region</td>
<td></td>
</tr>
<tr>
<td>area_S</td>
<td>Dummy: Startup located in the Mezzogiorno macro-region</td>
<td></td>
</tr>
<tr>
<td>dip_16</td>
<td># of employees of 2016 (startup)</td>
<td></td>
</tr>
<tr>
<td>dip_15</td>
<td># of employees of 2015 (startup)</td>
<td></td>
</tr>
<tr>
<td>inc_16</td>
<td># of incubates in 2016</td>
<td></td>
</tr>
<tr>
<td>cert_6_11</td>
<td>Dummy: listed as certified incubator</td>
<td></td>
</tr>
<tr>
<td>dir_fin</td>
<td>Dummy: the incubator does direct financing</td>
<td></td>
</tr>
</tbody>
</table>

![Correlation Table](image)

### Figure 5.50: Correlation table (revenues’ growth database)
the growth of the revenues. One interpretation could be that newly formed firms (they were considered from 2011) start with very low revenues that, in relative terms, grow very fast (the growth in percentage is therefore high), the same does not come so easily for more mature firms with higher revenues that, in order to obtain the same growth level, should increase their absolute revenues in an exorbitant way.

The best result with the regression (employees’ growth) was obtained with the variable number of incubatees (figure 5.53). The coefficients of the model are different from zero at a weakly significant level and the variance explained is lower than before. The only significant variable (0.01 level) is “S_inc” and it has a clearly positive effect on the growth of employees (it should be taken in account that the average number of employees is quite low).

The best result with the Tobit (revenues’ growth) was obtained with the variables age of the startup and direct financing (figure 5.54). The coefficients of the model are not all simultaneously zero with high probability. Both the age of the startup and direct financing result significant (at 0.05 level) and neither of them includes zero in its confidence interval. The former has the same effect as the regression, the latter instead has a clear positive effect on the revenues. The reasons could be that a reliable source of capital helps growth or that the possibility of an investment spurs growth or maybe it is a sign of a more
**Figure 5.52:** Regression results (revenues’ growth database)

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>332.566651</td>
<td>4</td>
<td>83.1416628</td>
</tr>
<tr>
<td>Residual</td>
<td>3281.48368</td>
<td>113</td>
<td>29.0396785</td>
</tr>
<tr>
<td>Total</td>
<td>3614.05033</td>
<td>117</td>
<td>30.889319</td>
</tr>
</tbody>
</table>

F(4, 113) = 2.86, Prob > F = 0.0265, R-squared = 0.0920, Adj R-squared = 0.0599, Root MSE = 5.3888

| rev_change | Coef. | Std. Err. | t    | P>|t|    | [95% Conf. Interval] |
|------------|-------|-----------|------|--------|----------------------|
| S_inc      | 1.812815 | 2.184745 | 0.83 | 0.408  | -2.51556 - 6.141189  |
| M_inc      | 1.357539 | 1.087326 | 1.25 | 0.214  | -0.796648 - 3.511729 |
| sta_age    | -0.9897912 | 0.4791347 | -2.11 | 0.037   | -1.92123 - 0.053695 |
| dir_fin    | 2.402112 | 1.219789 | 1.97 | 0.051  | -0.014502 - 4.818733 |
| _cons      | 4.119339 | 2.044862 | 2.01 | 0.046  | 0.681533 - 8.170634  |

**Figure 5.53:** Regression results (employees’ growth database)

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>23.4465577</td>
<td>3</td>
<td>7.81551922</td>
</tr>
<tr>
<td>Residual</td>
<td>383.824713</td>
<td>119</td>
<td>3.22541776</td>
</tr>
<tr>
<td>Total</td>
<td>407.271271</td>
<td>122</td>
<td>3.33828911</td>
</tr>
</tbody>
</table>

F(3, 119) = 2.42, Prob > F = 0.0692, R-squared = 0.0576, Adj R-squared = 0.0338, Root MSE = 1.7959

| emp_change_m | Coef. | Std. Err. | t    | P>|t|    | [95% Conf. Interval] |
|--------------|-------|-----------|------|--------|----------------------|
| S_inc        | 1.619065 | .6199964 | 2.61 | 0.010  | .3914103 - 2.84672  |
| M_inc        | .5483964 | .4836244 | 1.16 | 0.277  | -1.258828 - 1.347613 |
| inc_16       | -0.0059162 | .0054132 | -1.09 | 0.277  | -.0166349 - .0048025 |
| _cons        | .2453943 | .3004361 | 0.82 | 0.416  | -0.3494992 - .8402877 |

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The best result with the Tobit (employees’ growth) was obtained with just the independent variables (figure 5.55). The coefficients of the model are different from zero at a weakly significant level. The only significant variable (0.05 level) is “S_inc” and it has a clearly positive effect on the growth of employees.

**Figure 5.54:** Tobit results (revenues’ growth database)
Figure 5.55: Tobit results (employees’ growth database)
Chapter 6

Conclusions

6.1 Results

I would like to highlight the value of this study: it is one of the first for the Italian social incubators’ ecosystem and has collected a relevant quantity of data (while maybe not exceptional).

Social incubators are younger than their counterparts (4.33 years on average versus 8.17 (mixed) and 9.74 (business)), and tend to be smaller (less than 10 employees) while the other typologies reach higher numbers, as a consequence there are no social incubators that employ substantially more people than others. These may be due to the fact that social incubation is quite young. Social incubators, together with mixed ones, tend to receive more applications than business incubators (they have double the percentage of incubators with more than one hundred requests). The distance is even greater between the number of incubatees of social incubators and the others, a little less than half of social incubators host more than twenty incubatees, the number is 10 per cent or less for the other two typologies. This may indicate that there are a certain number of social incubators that cover most of the incubation demand, and therefore it would be a sign of polarization.

Social incubators distinguish themselves in the provision of services like social impact measurement and training or consulting on business ethics and CSR, but, contrarily to what can be expected, they are not provided to almost all incubatees, sign that a full integration of this aspect has yet to come, even in organizations focused on it. Social incubators seem also to offer space and related services much less than the other typologies. The typology of incubatees is another variable that differs greatly between social incubators and the others, the former has around 70 per cent of non-profit and hybrid organizations, while the latter have more than 90 per cent of for-profit.
The attention of incubators toward the community is generally quite high, mixed and social incubators seem to care more about the topic, though.

Social incubators seem to spend more than business incubators in managerial and technical support, while spending less than half in structure management and shared services (the offer of the latter is also less). The revenues mirror the costs.

Social incubators have a large predominance of organizations working in the field of culture, arts and crafts, while areas such as sustainable finance and consumer protection, poverty and social exclusion and peace and justice tend to be underrepresented.

Social incubators find considerable challenges in the financial aspect of incubating social businesses, but also in having different languages and objectives. Interestingly, business incubators do not think that they would have these problems, and the reasons for not incubating social businesses are quite unrelated with incubation. While this is a positive sign for social businesses, one cannot help to wonder if it also means that they do not really know those businesses.

The econometric analysis revealed no significant difference between social or mixed incubators and business incubators regarding their effects on the revenues’ growth, the result is different for employees’ growth, in fact, social incubators have a significant and positive impact.

In a nutshell, social incubators, while sharing some aspects with other typologies of incubator, seem to have their own peculiar traits. Moreover, they do not seem to have a significantly different effect on revenues’ growth (this means that while the effect is not consistently better, it is not consistently worse either, the latter can be considered an achievement in itself, given the social focus), but they do seem to have a better influence on the growth of employees.

6.2 Limits of the study

As said at the start of the thesis, studies on the Italian system of incubation focused on the social aspects are somewhat lacking, the same goes for comparative studies. This was meant, therefore, as a first step in the understanding of the topic. Keeping this in mind, the choice was to have a large scope with the analysis of diverse information. Given that the resources were limited, it was not possible to go excessively in depth when looking for information, nor gather more data. So, two important limits are the quantity and the level of detail of the data. Quantity would have helped in offering more significant views on the differences between different typologies of incubators and detecting with certainty even subtle differences, the detail would have helped in giving richer insights, for example, what other problems do social incubators find in the incubation of social businesses? Or
what is the exact nature and origin of donations? Or what kind of measurement do they use for performances? Did the incubatees attend an entire incubation program, only a part, at what point of it were they in 2016? etc. Along the same lines, having data on multiple years would have help in gauging with more precision the effects of the incubation activity, but also the development of the incubators themselves.

Another limit is related to the use of relative values (growth in percentage) as dependent variables: incredible growth may be minimal in absolute terms.

The absence of a control group for the startups leads to obvious limitations in the interpretation of results: it is possible to say if the growth is better inside one typology of incubator or another, but not if it is better than outside an incubator.

### 6.3 Avenues for further research

The limits of this study are where further research should be going. From one point of view the same research done with more data would allow to have more significant results and detect more subtle differences, from the other, every aspect treated in this research has just been poked and could be wide enough to fuel an entire study (the questions proposed in the previous section are all but an example of all the ones that could be asked). Extending the study to multiple years or to other countries would also be viable and interesting developments.
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Appendix A

Survey

The text of the survey follows:

### Impatto sociale degli Incubatori e Acceleratori Italiani – Questionario 2017

**Istruzioni:** Per tutte le risposte considerare i dati del 2016. Se nella vostra organizzazione sono svolte anche altre attività, per favore riferirsi solo all’attività di incubazione/accelerazione.

<table>
<thead>
<tr>
<th>Informazioni anagrafiche</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qual è la ragione sociale</td>
</tr>
<tr>
<td>dell’incubatore/acceleratore?</td>
</tr>
<tr>
<td>Qual è l’anno di costituzione</td>
</tr>
<tr>
<td>dell’incubatore/acceleratore?</td>
</tr>
<tr>
<td>Qual è stato il numero medio</td>
</tr>
<tr>
<td>del dipendenti (FTE) nel 2016?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dati finanziari</th>
</tr>
</thead>
<tbody>
<tr>
<td>Come si dividono in percentuale i costi operativi dell’incubatore?</td>
</tr>
<tr>
<td>Per favore ripartire i costi del personale proporzionalmente all’impegno sulle seguenti attività</td>
</tr>
<tr>
<td>Voce di costo</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>a Costi per la gestione della struttura e costi relativi a servizi generici (es: bollette, attrezzature, cancelleria)</td>
</tr>
<tr>
<td>b Servizi di accompagnamento imprenditoriale e tecnici (es: assistenza legale, amministrativa, contabile, marketing, proprietà intellettuale, trasferimento tecnologico)</td>
</tr>
<tr>
<td>c Formazione alle imprese incubate/accelerate</td>
</tr>
<tr>
<td>d Altri servizi agli incubati</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quali sono le entrate dell’incubatore in percentuale?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voce di costo</td>
</tr>
<tr>
<td>a Affitti</td>
</tr>
<tr>
<td>b Ricavi dall’erogazione di servizi agli incubati</td>
</tr>
<tr>
<td>c Ricavi da investimenti (es: derivanti dall’avere o vendere equity)</td>
</tr>
<tr>
<td>d Altri ricavi (es: contratti di consulenza)</td>
</tr>
<tr>
<td>e Sussidi e fondi nazionali e internazionali (compresi cofinanziamenti)</td>
</tr>
<tr>
<td>f Donazioni</td>
</tr>
</tbody>
</table>

Quante richieste di incubazione/accelerazione avete ricevuto in totale nel 2016?

Quante organizzazioni avete incubato/accelerato nel 2016? (considerando eventuali imprese già presenti e nuovi ingressi)
### Attività

<table>
<thead>
<tr>
<th>Offerte (direttamente o indirettamente) questi servizi alle organizzazioni incubate/accelerate?</th>
<th>No</th>
<th>Solo ad alcune</th>
<th>A molte</th>
<th>A tutte</th>
</tr>
</thead>
<tbody>
<tr>
<td>a Accompanamento manageriale (es: redazione di business plan, costituzione societaria, sviluppo modello di business, mentoring, marketing e supporto alle vendite, internazionalizzazione)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b Spazi fisici (inclusi servizi condivisi)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c Formazione imprenditoriale e manageriale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d Supporto alla ricerca di finanziamenti (incluso aiuto nel dialogo con gli investitori)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e Servizi amministrativi, legali e giuridici</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f Supporto nella gestione della proprietà intellettuale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g Supporto nello sviluppo di relazioni - networking (ad esempio con centri di ricerca, università, enti statali, aziende ed altre imprese incubate)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h Supporto allo sviluppo e allo scouting di tecnologie</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i Servizi di valutazione dell’impatto sociale delle vostre imprese</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>l Formazione/consulenza su Business Ethic e Corporate Social Responsibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Imprese

| Quante organizzazioni avete incubato/accelerato per ciascuna delle seguenti tipologie in percentuale nel 2016? | | | | |
|---|---|---|---|
| a Organizzazioni non-profit | | | |
| b Imprese ibride (es: Srl innovativa a vocazione sociale, B-corp, impresa sociale) | | | |
| c Imprese for-profit | | | |

<table>
<thead>
<tr>
<th>Supportate imprese a significativo impatto sociale?</th>
<th>Sì</th>
<th>No</th>
</tr>
</thead>
</table>

Se supportate imprese a significativo impatto sociale:

| Quante imprese a significativo impatto sociale avete incubato/accelerato nel 2016? (considerando eventuali imprese già presenti e nuovi ingressi) | | |
|---|---|

---

1 Per *Imprese ibride* si intendono le imprese che pur non essendo non-profit destinano parte degli utili a scopi sociali o hanno esplicitamente tra i propri obiettivi degli obiettivi sociali.

2 Sono organizzazioni che introducono *innovazione sociale* cioè "una nuova soluzione ad un problema sociale che è più efficace, efficiente, sostenibile o giusta delle soluzioni esistenti e per la quale il valore cresce maturando primariamente per la società tutta, piuttosto che per individui privati".
### In quali settori operano/operavano?

(indicare il numero di imprese per ciascun settore, alcune imprese possono appartenere a più settori)

- a) Salute e benessere (incluso sport)
- b) Povertà ed emarginazione sociale
- c) Sviluppo della comunità
- d) Cultura, arti e artigianato
- e) Protezione dell’ambiente
- f) Finanza sostenibile e protezione dei consumatori
- g) Inserimento lavorativo, creazione di posti di lavoro, uguaglianza di genere
- h) Educazione
- i) Turismo sociale e consumo responsabile
- j) Pace e giustizia
- k) Servizi a imprese sociali e organizzazioni non-profit

Offrite servizi specifici per questo tipo di imprese come ad esempio strumenti finanziari ad hoc?

<table>
<thead>
<tr>
<th>Sì</th>
<th>No</th>
</tr>
</thead>
</table>

Quali difficoltà avete riscontrato supportando imprese a significativo impatto sociale? (risposta multipla)

- a) Minori ritorni finanziari attesi
- b) Maggiori difficoltà a trovare finanziamenti
- c) Obiettivi e linguaggi diversi
- d) Nessuna difficoltà
- e) Altro

Avete delle metriche di valutazione dell’impatto sociale delle imprese a significativo impatto sociale che incubate/accelerate?

<table>
<thead>
<tr>
<th>Sì</th>
<th>No</th>
</tr>
</thead>
</table>

### Se non supportate imprese a significativo impatto sociale:

Perché non supportate imprese a significativo impatto sociale? (risposta multipla)

- a) Minori ritorni finanziari attesi
- b) Maggiori difficoltà a trovare finanziamenti
- c) Obiettivi e linguaggi diversi
- d) Nessuna di queste imprese ha fatto richiesta/Non avevano i requisiti minimi per essere accettati
- e) Fuori dalla mission dell’incubatore
- f) Altro

### Finanziamento e Community

A quanto ammontano i finanziamenti ricevuti dalle organizzazioni che avete incubato/accelerato nel 2016?

<table>
<thead>
<tr>
<th>Sì</th>
<th>No</th>
</tr>
</thead>
</table>

Avete investito capitale di rischio nelle organizzazioni incubate nel 2016?

<table>
<thead>
<tr>
<th>Sì</th>
<th>No</th>
</tr>
</thead>
</table>

Avete organizzato eventi/workshops/seminari aperti anche ai non incubati?

<table>
<thead>
<tr>
<th>Sì</th>
<th>No</th>
</tr>
</thead>
</table>

Avete fatto altri sforzi specifici per creare una community?

<table>
<thead>
<tr>
<th>Sì</th>
<th>No</th>
</tr>
</thead>
</table>

Vi chiediamo per favore di inviarci l’elenco delle organizzazioni incubate/accelerate nel 2016 a questo indirizzo email: impattosociale@polito.it

Grazie per la partecipazione

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Appendix B

Expert Panel

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barillì Federico</td>
<td>Italia Startup</td>
</tr>
<tr>
<td>Bartolomeo Matteo</td>
<td>Make a cube</td>
</tr>
<tr>
<td>Colombelli Alessandra</td>
<td>Politecnico di Torino</td>
</tr>
<tr>
<td>Landoni Paolo</td>
<td>Politecnico di Milano</td>
</tr>
<tr>
<td>Nannini Marco</td>
<td>Impact Hub Milano</td>
</tr>
<tr>
<td>Orestano Laura</td>
<td>SocialFare</td>
</tr>
<tr>
<td>Sansone Giuliano</td>
<td>Politecnico di Torino</td>
</tr>
</tbody>
</table>
Appendix C

Employees’ growth database figures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Revenue 2016</th>
<th>Revenue 2015</th>
<th>Revenue Growth</th>
<th>Employees 2016</th>
<th>Employees 2015</th>
<th>Employees Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>€ 182,954.75</td>
<td>€ 115,019.99</td>
<td>195.1%</td>
<td>3.2</td>
<td>2.2</td>
<td>47.0%</td>
</tr>
<tr>
<td>Median</td>
<td>€ 45,733.00</td>
<td>€ 45,286.00</td>
<td>9.8%</td>
<td>1.0</td>
<td>1.0</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

*Figure C.1: Startups’ Quick Facts (employees’ growth database)*
Figure C.2: Distribution of startups by region (employees’ growth database)

Figure C.3: Startups’ sectors (employees’ growth database)