Cross-Cultural Analysis of Selection Mechanisms in Business Incubators: Insights from Romania and Italy

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For any start-up, adhering to an entrepreneurial ecosystem is an engine for business innovation. The specific objectives of this paper are to address themes and characteristics (also comparing organizational structures and services provided in different national contexts: Italy vs. Romania) in terms of selection mechanisms adopted by business incubators, to analyse and deepen the contribution that incubators make to new business initiatives. From a methodological point of view, the comparative analysis of the incubator activities in Italy and Romania was performed by collecting relevant information outlining selection mechanisms that provide a qualitative magnitude to the start-ups' selection criteria. Findings reflect different perspectives regarding the approach of selection mechanisms in these two European countries. Furthermore, Romanian start-ups could learn practices from the Italian start-up ecosystem, enabling them to better perform in the future.

INTRODUCTION

Although the evolutionary theory of the firm argues that selection mechanisms are a necessary phenomenon Aldrich (1999) and that the failure of new firms is a natural thing (Everett and Watson, 1998), there is an extensive literature that supports the existence of theoretical reasons for supporting innovative start-ups. and for the existence of support structures, such as business incubators. According to this literature, companies in the early stages of their existence operate in a context characterized by "market failures", which would prevent them from reaching a state of social efficiency in the absence of public

intervention. Such failures could be attributed, in part, to the difficulties that start-ups would face in accessing particularly important inputs, such as financial resources (due to shortcomings in financial markets), knowledge, technology and networking relationships that are extremely important to the company's success (Colombo and Delmastro, 2002). On the other hand, innovative start-ups would generate positive externalities, consisting in stimulating innovation and changing technological paradigms outside the "walls" of the company, favouring the economic system as a whole. The reasons summarized here would then lead to the justification of intervention through entities - through incubators more precisely - to support developing companies and make them less vulnerable in the early stages of their existence. A study by Johnsrud and Springs (2004) highlighted the possibility that incubators could become financially self- sufficient due to the increase in the value of start-ups (as in any other form of private equity investment) or by earning a profit from the sales of a innovative product; according to other authors (Cheng and Schaeffer, 2011), such a possibility would in fact be quite unlikely, given that the time required for investments in incubated companies to reach at least the break-even point is usually very long and quite risky and these companies would need an extremely large "portfolio of start-ups". Many entrepreneurs claim that the governments should have a strategy through which all the ecosystem components to be interconnected to support entrepreneurial initiatives (Roja and Nastase, 2014).

In fact, in many countries - which show significant differences from an institutional, economic, cultural and development point of view - incubators are considered instruments of public intervention (national and / or regional), which aim to achieve economic policy objectives: at macro, to promote the economic development of an area, job creation and increase the rate of entrepreneurship; at the company level to increase the "survival" rate of innovative start-ups. In most cases, incubators are non-profit organizations (approximately 90% worldwide, according to estimates by Lee and Hunt, 2008) and rely heavily on public resources, although in some cases these entities are managed on an entrepreneurial basis and public contributions are supplemented by private funds as well as revenues generated by incubation services.

THEORETICAL FRAMEWORK

Various attempts have been made to conceptualize the configuration of an incubator and its activity. Campbell, Kendrick, and Samuelson (1985) present the first explicit link between incubator and the business development of incubated firms. This study examines the four areas in which a business incubator can create value: diagnosing the needs of new businesses, providing services and related monitoring, providing capital and allowing access to a network; this is a

fundamental contribution, as, for the first time, the activities that allow the transition from a business idea to a real business are illustrated in detail.

Hisrich (1988) places the business incubator in a broader context of a business development centre, defining the concept of innovation continuum. The author views a business incubator as a reality capable of promoting the development of new businesses, providing both the operational structure for implementing the business idea and trust, as elements of form necessary to maintain control over four fundamental conditions of assistance: management, marketing, accounting and finance.

Kuratko and LaFollette (1987) consider the screening process to be a critical element for the incubator: a less restrictive procedure, aimed only at attracting potential entrepreneurs, could lead to major failures and, ultimately, even to the closure of the structure, but in at the same time, too strict a procedure can lead the incubator to choose less innovative and less risky projects, which can limit opportunities for growth and employment. Consequently, in the absence of standard screening measures, incubation structures should go through a testing period to maintain a selection of companies that is in line with their objectives. Another empirical evidence in this area that seems particularly important is provided by Lumpkin and Ireland (1988), who analyse the role of incubator managers. According to the authors, these subjects should use indices on critical success factors of companies to select potential incubated companies. In this study, conducted on 75 interviewed managers, three areas are identified (management team experience, financial strength and market factors), although no observations are made about which are the most effective measures among them.

Scherer and McDonald (1988), analysing 5 companies incubated by a technology centre, point out that the best approach to help start-ups is training in order to maintain a balance of flexibility in the short term, with a decision-oriented perspective. in the long run, thus promoting business planning in incubated companies. In the short term, companies must be prepared to make constant changes based on the feedback resulting from the development phases of product prototypes and their refining, as well as in the post-marketing periods when defining the company's market position. At the same time, it is necessary to carefully manage the resources currently available, given the long-term choices that will have to be made such as: abandonment, redefining or developing a particular product.

An analysis in a more complete perspective is provided by Marlow and McAdam (2012), who recognize that the development of incubated start-ups, in the early stages, is strongly favoured by incubator services. However, only in the early stages of life (companies under one year old), start-ups have high expectations about the "intangible" managerial services provided by the incubator (in particular: collecting resources, organizing meetings with business advisors

and staff search), but as the company grows, there is a tendency to train skills internally and this decreases the willingness of companies to share problems / ideas with the incubator network.

The study by Autio and Kloftsen (1998) mainly explores the relationship between incubator management and that of incubated companies, focusing on best practices identified for specific contexts. The same combination is considered in Studdard's analysis (2006). However, this latest study highlights how the strategic knowledge gained by the incubator, in relation to the relationship with the incubator management, does not affect the development of new products or technological skills, but rather positively influences the company's reputation. Studies such as the two mentioned are particularly important, as they shift the focus from focusing on the "structure of incubators" to the whole incubation area, emphasizing the importance of assessing the key competencies of the incubator to be appropriate for the incubated potential.

Nowak and Grantham (2000) analyse the density of industrial networks and the services offered by incubators: recognizing in them the possibility of developing a true "virtual value chain", referring to the "virtual incubators" Bøllingtoft (2012) recognize the effects positive network development for companies in a business incubator.

Another study in this field is that of Mas-Verdú, Ribeiro-Soriano and Roig-

Tierno (2015) which outline the value of incubation activity and other characteristics typical of companies such as: export, size, sector and technology. This study shows that incubation is not enough, but that it can provide real benefits, especially if it is associated with a small company size (in the study, micro-enterprises are distinguished from small ones).

To date, studies and research have been reported that analyse, in various ways, the incubation activity, without paying special attention to what happens after this period. A first proof of this is provided by Schwartz and Göthner (2009), who note an immediate negative effect on the survival of firms after leaving the incubator: in fact, a total closure rate of 30% is detected, of which more less than 10% is caused by purchases on the market. From this study it is possible to conclude that it is not the incubation structures that are generally inefficient, but rather the incubator selection mechanisms of start-ups may not be as efficient as the market. The study by Flanschger, Winkler, Reinish (2012) shows that in the first years after leaving the business incubator, start-ups again need support, which can be provided by a business accelerator.

A research conducted by Agapie et al. (2018) highlights the existence of key factors which encourage the entrepreneurial attitudes and behaviours within Romanian private environment, motivating people to embrace entrepreneurial careers and consequently to create new ventures and important innovations in all fields.

RESEARCH METHODOLOGY

As part of the selection process, we decided to obtain information both on the methodologies for collecting business ideas and on the elements that are taken into account when evaluating business ideas for the inclusion of start-ups in the process. incubation.

In particular, we tried to collect the following data using the questionnaire used as research tool: what is the method of selection and entry into the incubation program; the way in which the trend of incubation applications and the business idea is evaluated from an innovative and qualitative point of view; if there is an increase or a decrease of the applications for acceptance to the incubation program in the last 5 years; how many business ideas have been presented recently for entering the incubation program; what percentage, usually, start-ups are admitted in the pre-selection phase for the initial screening (before the start of the actual incubation program); in what percentage (in terms of applications received), start-ups are admitted to the incubation programs.

In the same context of analyzing the selection process, we considered it appropriate to focus on the assessment that incubators give to the conditions for including an innovative start-up in their programs. We asked the representatives of the incubators the degree of importance they give (selecting a value from 1 to 5) to certain elements in order to evaluate or not the inclusion of a start-up in their programs, in particular:

- the degree of importance attributed to the potential of the business idea, in relation to the product / service and the market;
- the degree of importance attributed to the quality of the business plan, especially with reference to the quality of economic and financial projections that are presented in relation to the product / service and the market, in addition to the quality of organizational and production processes that the start-up intends to make them;
- the degree of importance attributed to the characteristics of the entrepreneurial team, in particular in relation to the technical skills that are
- necessary for the realization of the product-service and with reference to the economic and financial skills for the management of the company. Particular attention in this area is paid to the analysis of entrepreneurial and personal skills that new entrepreneurs must show;
- the degree of importance assigned to the stage of advancement / implementation of the start-up structure. This area includes both the elements related to the definition of the product / service characteristics, as well as the elements related to the organizational structure, as well as any technological and commercial partnership initiated by the subjects that

represent the start-up for inclusion in the incubation programs;
- the degree of importance attributed to the availability of financing funds with which the start-up came into contact;
- the degree of importance attributed to the projects that the start-up presented in order to obtain funds from national and European programs that support innovative entrepreneurship and the development of innovative products / services;
- the degree of importance attributed to the coherence of the business project with the incubator's mission and in relation to the sector / technologies that are of interest for the specific area in which the incubator operates (or the incubator partners / supporters operate);
- the importance attributed to the fact that start-up projects represent a technological transfer from a university or research center or represent the result of a research project carried out in the academic environment.

FINDINGS

We will first analyze the answers about the selection process of start-ups and about the characteristics of the incubation program proposed by the incubators.

Regarding the "input" selection of start-ups for their inclusion in incubation programs, three main options are considered:
- the specific call defining and highlighting the characteristics of the start- ups for entering the incubator, indicating all the specific requirements that candidates must present and demonstrate in order to be included in the incubation programs;
- direct application and often through the front office setting up a meeting between the candidate and the incubator contact person. In this case, it is based on the experience of the expert, and the evaluation is much more discretionary than that made by a specific call;
- a form that integrates the answer to a call and the direct application, modulated in different ways at the discretion of the incubator and its specific operating methods.

Differences between the selection procedures of start-ups for incubation among incubators from Romania and Italy

Table 1

Selection procedure for incubation	Romania	Italy
Specific call	43.64%	28.38%
Direct application – front office	45.45%	28.38%
Hybrid form: answer to a call and the direct application	10.91%	43.24%

Source: empirical research conducted by authors

From the collected data (presented in Table 1), the Romanian incubators operate mainly with specific calls (43.64%) and direct "front-office" applications (45.45%), while the Italian incubators operate mainly with forms integrated and modulated between specific calls and direct selection (43.24%).

Table 2 reveals the scenario of presenting the business ideas that reached the incubators, in the Romanian context and in the Italian context. We observe a divergence between the ability of incubators to stimulate incubation requests and the presentation of business ideas. In the Romanian context, most incubators are between 20-50 incubation applications, while in Italy, most incubators seem to stimulate more business ideas and only 6.76% of incubators say they have received less than 20 requests. Therefore, we tried to understand what type of incubator (in Romania and Italy) could attract the large number of applications and business ideas, correlating the aggregate data (the number of business ideas received) with other elements.

Comparative approach to the number of incubation requests submitted to incubators in Romania and Italy

Table 2

Number of requests for incubation	Romania	Italy
Less than 20	58.18%	6.76%
Between 20 and 50	29.09%	31.08%
Between 50 and 100	7.27%	32.43%
More than 100	5.45%	29.73%

Source: empirical research conducted by authors

Table 3 highlights the breakdown of the number of requests depending on the type of incubator (private, public and mixed).

Regarding the Romanian scenario, we note the following aspects:
- mixed type incubators are placed in the medium-low range, with 50.00% receiving from 20 to 50 requests;
- private incubators are mainly in the low range, with a number of requests of less than 20 in the last year;
- public incubators, like private incubators, are placed in an intermediate range, 51.85% have received less than 20 applications and 29.63% of incubators that have received 20 to 50 applications in the last year.

The Italian scenario is different, in which more than half of the public incubators (58.33%) have received over 100 requests and business ideas in the last year. Private incubators are also in the medium-high range, with 25.00% receiving over 100 applications and 35.00% between 50 and 100 applications.

Correlation between the number of incubation requests in incubators in Romania and Italy and the type of incubator

Table 3

Country	Romania			Italy		
Number of requests for incubation / Incubator type	**Mixed**	**Private**	**Public**	**Mixed**	**Private**	**Public**
Less than 20	50%	22.73%	29.63%	40.91%	32.50%	8.33%
Between 20 and 50	33.33%	0%	7.41%	36.36%	35%	16.67%
Between 50 and 100	16.67%	77.27%	51.85%	0%	7.50%	16.67%
More than 100	0%	0%	11.11%	22.73%	25%	58.33%

Source: empirical research conducted by authors

Taking the total number of requests (divided into numerical classes) and correlating them with profit-oriented and non-profit-oriented incubators, respectively, in the Romanian and Italian context, two very different scenarios are observed. In Romania, non-profit incubators have the most incubation requests, even if the numerical class is always the medium-small: 49.00% of non-profit incubators received less than 20 requests and 23.64% received between 20 and 50 applications. However, in Italy, the profit and non-profit sectors are equivalent in terms of incubation applications received in the last year, and the numerical classes are almost evenly divided between the 2 sectors (Table 4).

Correlation between the number of incubation requests in incubators in Romania and Italy and the incubator orientation (profit vs. non-profit)

Table 4

Country	Romania		Italy	
Number of requests for incubation / Incubator orientation	**Non-profit**	**Profit**	**Non- profit**	**Profit**
Less than 20	23.64%	5.45%	12.16%	18.92%
Between 20 and 50	5.45%	1.82%	13.51%	18.92%
Between 50 and 100	49%	9.09%	2.70%	4.05%
More than 100	5.45%	0%	13.51%	16.22%

Source: empirical research conducted by authors

Table 5 shows the percentage of proposals that are considered interesting enough (we will see below the parameters that are applied for their evaluation) to be able to continue with a further detailed analysis. In the second macrophase of the selection process, we usually try to deepen some elements and, at the same time, move to a first entrepreneurial orientation to test the capacity / competence

of entrepreneurs who come up with proposals and their needs, to could be connected to the type and level of services provided by the incubator. The table reveals, in parallel, the percentages of proposals for which the Italian and Romanian incubators stated that they have passed to this second stage. From the data collected, it seems that, in general, Romanian incubators adopt stricter selection parameters than Italian incubators for moving to the second step of in-depth analysis and detailed analysis of business plans.

The share of proposals for incubation ideas considered relevant by incubator managers in Romania and Italy

Table 5

Number of requests for incubation	Romania	Italy
Less than 10%	20%	0%
Between 10% and 25%	20%	6.76%
Between 26% and 50%	41.82%	37.84%
More than 51%	18.18%	55.41%

Source: results of empirical research conducted by the authors

Table 6 highlights the percentage of inclusion in the incubation programs, out of the total number of applications received. Regarding the Romanian context, 36.36% of incubators tend to admit to programs a percentage of start-ups between 26% and 50%, and other 36.36% of incubators a percentage less than 10% of the total requests received. In the Italian context, there seems to be a greater selection, with 59.46% of incubators stating that they admit only 10% to 25% to incubation programs. In both Romanian and Italian contexts, very few incubators claim to admit more than 51% of start-ups that have applied for inclusion in incubation programs.

Also, in terms of admission to incubation programs (as we saw in admission to the second phase of analysis / guidance) there is, in both contexts, a greater selection of sectoral incubators, compared to multisectoral incubators.

Comparative analysis of the degree of inclusion in the incubation programs of applications submitted to incubators in Italy and Romania

Table 6

Number of requests for incubation	Romania	Italy
Less than 10%	36.36%	4.05%
Between 10% and 25%	18.18%	59.46%
Between 26% and 50%	36.36%	28.38%
More than 51%	9.09%	8.11%

Source: results of empirical research conducted by the authors

CONCLUSIONS

The analysis of the results shows that Romanian incubators that benefit from the economic results of start-ups tend to use more the characteristics of the entrepreneurial team, the potential of the business idea and the business area in accordance with the incubator's mission, while Romanian incubators that do not benefit the economic results of start-ups tend to use more the business area in accordance with the mission of the incubator and the availability of financial resources.

On the other hand, Italian incubators that benefit from the economic results of start-ups tend to use more the characteristics of the team and the potential of the business idea, while Italian incubators that do not benefit from the economic results of start-ups tend to use more the potential of the business idea, the level of the proposed technological content, the origin of the technology transfer processes from the university or other research centres and the elaboration of a project for financing the enterprise with national and / or EU funds.

Regarding the incubators that benefit from the economic results, it is essential that the Romanian incubators better evaluate the potential of the business idea and the team that proposes it (subjective and subjective context attributed to the genetics of start-ups), insofar as the idea of business is aligned with the objectives of the incubators (Economic System). Exactly the same, albeit with a greater emphasis, is the position of Italian incubators that benefit from the economic results of incubated start-ups.

In what concern the incubators that do not benefit from the economic results of the incubated start-ups, in the Romanian context it is preferred to select business ideas if they are aligned with the objectives of the incubator and if the candidates have financial resources, while Italian incubators prefer to capitalize the potential of the business idea, on the level of technology contained in the proposals (especially if it transfers technology from universities and research centers) and on linking the business idea to European or national funding programs. From this perspective we can summarize the fact that Romanian incubators that do not benefit from economic results tend to position themselves more within the economic system, while Italian ones observe more the genetics of start-ups and the Open Innovation scenario.

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