Fostering Innovative Start-Ups, The case of Start-Up Start-Hope project¹

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Abstract

In modern economies, the presence of an innovative environment that promotes the research and the business structure, enhancing the skills of the individual, is considered a basic condition for the competitiveness of a Country. The paper aims to explore the effectiveness and the experience of fostering actions for innovative startups in the Italian context. In particular, the study will move from the analysis of the case study about the "Start-Up Start-Hope" project in the administrative region Abruzzo. The results reveal that Start-Hope Fund has selected and actually supported both technological and traditional start-ups. In addition, the promising perspective elaborations, about the investment made, the estimated value of production and the involved human capital, attest the goodness and the effort in promoting this type of innovative ventures. The paper offers some contributions to literature and extends the understanding about the effect of the fostering program in innovative entrepreneurship.

Keywords: innovative start-ups; fostering policies; supporting programs; case study; Italy.

1. Introduction

Innovative start-ups are usually counted as an important factor for the economic and social growth (Acs & Audretsch, 1990; Storey& Tether, 1998; Boyer & Blazy, 2014; Iacobucci & Micozzi, 2016). The motivating reasons, about this role played by small start-up companies in sectors with high technological and innovative impacts, are to be counted to the deficit of internal incentives and flexibility in large enterprises (Almeida & Kogut, 1997; Hanks, 2015; Caliendo & Künn, 2015). The attention, after Schumpeter's discussion regarding the 'reutilizing' of innovation, often neglects the other side of the equation, namely the emphasis on the dynamic role played by new business innovations. Schumpeter's pessimism about the role of the entrepreneur (1943, p. 152) led him to characterize the process of 'creative destruction' increasingly driven by large companies which are able to innovate within a 'reutilized regime'. However, there are real qualitative evidences in literature that support the role of these small businesses and of some individuals in the introduction of "radical" innovations (Autio et al., 2014; Sahut & Peris-Ortiz, 2014; Scherer & Ross, 1990). In addition, Baumol's studies follow this direction (Baumol, 2002, 2006, 2010).

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Smaller companies are more likely to possess the organizational characteristics which allow the actions needed to exploit the new opportunities (Klotz et al., 2014; Andersson, 2015). In addition, a number of factors, such as financing, government regulations, the motivations and targets of employers provide the basic conditions to small businesses, which are more inclined to embrace the innovations and changes (Nooteboom, 1994; Coeurderoy & Murray, 2014). Then the small start-up businesses are better equipped to take advantage of new technological opportunities through exploration of diversity (Kibler et al., 2014). An empirical support about the link between the logic of the new start-ups and radical innovation is provided by Henderson (1993). In his study, Henderson shows that large firms are less productive than the start-up companies in the exploitation of radical innovations are.

In view of the above, in modern economies the presence of an innovative environment that promotes research and a business structure, which can enhance the results and the skills of the individual, is now considered a necessary condition for the competitiveness of a Country (Baranenko et al., 2014; Padovani & Provenzano, 2015). Being able to create system conditions favorable to the emergence and development of innovative start-ups, it allows, therefore, to provide a significant contribution to the economic growth and employment, particularly among young people, moreover it promotes the development of knowledge on the whole business structure of the country, oriented to high-tech and high skills (Harzing & Giroud, 2014; Mohsin et al., 2015). The relevance of these arguments has attracted the active and concrete interest of policy makers at European and Global level, through cohesive policy and support to the development of such organizational forms, which are essential for global innovative growth. This paper aims just to investigate the effectiveness and the experience of the support actions of the innovative start-ups in the Italian context. In particular, the study will move from the analysis of the case study about the Start-Up Start-Hope initiative in the administrative region Abruzzo. Even Italy - lacing the active steps on the European and Global scene - intended to equip itself, with the Decree Law 179/2012, on "Further urgent measures for the Country's growth", of some measures to encourage the creation and development of innovative start-ups, promoting a renewed approach to the public support for entrepreneurship.

The paper aims to provide a cognitive contribution - both in strictly academic perspective and in policy as well about the mechanisms to promote innovation of new innovative companies in the regional context, with reference to the emerging entrepreneurial possibilities and the dissemination of knowledge of technology, considering their effectiveness and value in order to better evaluate and plan the policies and management practices.

2. Literature review

2.1. Innovative start-ups: definitions and characteristic features

In the current debate it is not always immediate the qualification of "innovative" for a small and medium enterprise. The OCSE (2004, p. 23) identifies the so-called "Innovative Small Medium Enterprises" (ISMEs) in that sub-group of small and medium-sized enterprises which seek to leverage innovation to grow and to gain competitive advantage. Unlike traditional ones, the innovative SMEs tend to use new technologies and / or innovative methods for the production of goods and provision of services. This sector is located largely in the high-tech enterprises (Gualandri & Schwizer, 2008).

In Europe, there is no single definition of innovative start-ups but, in the framework of the European research policy and, more specifically, within the 7th Framework Program, it is possible to identify some characteristics that innovative start-ups must show to be sure to receive the aids which are compatible with the common market. In order to guarantee the granting of a loan from banks and other financial intermediaries, it would require that the innovative start-up, which receives them, meets, by way of example, at least one of the following requirements:

- (i) It is a "high growth" company, driven by research and development or innovation;
- (ii) It applies for a loan with the purpose to invest it in the production or development of products, innovative processes and/or services;
- (iii) It has won an award for innovation in the last twenty four months, etc.

These are, however, some indicators that cannot be used, tout court, to measure innovation because they are often related to the legal context within which the start-ups have been developed. Concerning the elements that characterize these business types it has to be noted that, compared to the traditional start-up companies, the innovative start-ups have to deal with limiting elements and unique emerging issues as well as insidious ones. (Audretsch, 2000; Kanniainen & Keuschnigg, 2004; Antunes & Cavalcanti, 2007).

Because of the innovative character of their production process or business process, the same are characterized by a lack of track records (Stucki, 2014; Aouni et al., 2013). This means that the potential investors of an innovative start-up cannot get any relevant information about, for example, the production processes of the products or about the relative markets, to be used as reference parameters for the evaluation of a proposed business plan. The value of an innovative project is therefore difficult to judge, even for the most experienced of investors and / or creditors (Festel et al., 2013; Jegelevičiūtė, &Valančienė, 2014). As a result, the gap resulting from information asymmetries between the founder of an innovative start-up and the investor is potentially very high, determining as a direct consequence some issues related to the rationing of credit (Dehlen et al., 2014; Coleman et al., 2016). In fact, the lenders can fractionate the credit, finance only a fraction of the assets and operations, claim a high warranty from founders or reduce the duration of the loans granted (Bonnet et al., 2016).

In addition, other stakeholders may consider the investments in innovative start-up particularly risky, in consideration of the lack of history, reputation and reliable qualitative-quantitative landmarks of the product and of the process (Hyytinen et al., 2015; Cooper, & Kleinschmidt, 1986). Nevertheless, employees may be reluctant to accept a job in such organizations if the risk of bankruptcy is considered high or the same company appears to be unknown to them (Cooper et al., 1994; Ashourizadeh et al., 2014). In addition, providers may be reluctant to grant trade credit, and customers may be skeptical about the reliability and quality of the acquired products. Taken together, these issues will reduce the potential for success and growth of innovative start-ups. In other words, the founders of innovative start-ups who identify the opportunities in order to overcome the problems, associated with the initial asymmetric information, on the interested markets, are likely to lead their new venture with greater success (see for example Binks & Ennew, 1996; Dehlen et al., 2014; Conti et al., 2013).

2.2. Policies and supporting interventions of innovative start-ups

There are two main reasons why the public and private interventions intend to support the creation and the growth of innovative start-ups, particularly technology-based, and the developing of entrepreneurship (Kochenkova et al., 2015). The first is the existence of market failure that would lead to situations of equity gap especially in the early stages of the life cycle of these companies (Commissione Europea, 2001).

The second reason for the policy maker refers to the role that the birth and the development of these companies assume for the economic growth, thus, as a source of spread of social benefits (European Commission, 2005; OECD, 2004, 2006; Lawton, 2002; Dubocage & Rivaud-Danset, 2002; Jääskeläinen et al., 2007). In view of this, the role of the supporting intervention, in the business development of the innovative start-ups, should first be framed in an action plan, with the definition of when and where to intervene, the identification of "operational" objectives and the rules of the game among the public operator and the private operators (European Commission, 2005; Jääskeläinen et al. 2007; McGlue, 2002). In relation to this, it must be defined the types of instruments to be activated, both on the demand side and the supply side of the risk capital, as well as the time horizon of the schemes of intervention. The final phase of this type of analysis should cover the evaluation of public programs in terms of business creation and wealth.

There is a general agreement that the role of the public authorities for the development of innovative SMEs should primarily promote the contextual conditions capable of positively influencing the supply and demand of funds, both formally and informally (David et al., 2000). The development of a private market for risk capital, for innovative SMEs, requires that any obstacles of tax and legal nature should be removed, that a managerial culture should be promoted and some specific markets should be created for the listing of the innovative companies, that facilitate the exit strategy of the venture capitalists (Prianichnikov, 2013; Wongsunwai, 2013). The direct intervention is realized with the creation of funds and public capital funds or funds in partnership with private capital. The beneficiaries should be specific types of businesses and / or stages of development, suffering from insufficient supply of private funds. The guiding principle of these interventions is that of the 'risk sharing', whereby the use of public funds should be carried out, apart from the preliminary stages of seed, only in the presence of private funds alongside them, in the context of schemes of public-private partnership (OECD, 2006). An interesting aspect of the debate affects precisely the specific theme of direct government intervention in the development of the venture capital market and the negative and limiting potential aspects (Lelux & Surlemont, 2003). In particular, the direct government intervention can produce negative effects on the development of the venture capital market for two reasons: non-optimal allocation of resources and the increase, rather than the decrease, of the barriers to entry in the sector for private capital (Szerb et al., 2013; Cumming & Dai, 2010).

The causes of these situations are due primarily to the fact that the management of funds is delegated to public managers who are missing of experience for the selection of the initiatives and do not enjoy the same incentive schemes of private managers (Lerner, 2002). Secondly, it has to be also highlighted the risk of crowding out the private capitals from the public ones (Cumming & MacIntosh, 2006). In this way, the marginal projects would be left to the private, by determining a so-called "market for lemon" (Ibrahim, 2014). However, this hypothesis does not seem to be reflected in the empirical studies conducted so far (Lelux & Surlemond, 2003).

3. Analysis of a case study: The Project Start-Up Start-Hope in the Abruzzo region

3.1. Methodological and defining elements

Consistent with the aims of the paper about the effectiveness of the supporting mechanisms of the innovative start-ups, here below we report the results deriving from the analysis of a case study in the context of the Italian region Abruzzo, in particular the role played by the project "Start-Up Start-Hope".

Start-Up Start-Hope is a revolving fund POR FESR 2007-2013, 1.2.2 activities. It is dedicated to the creation and growth of innovative companies able to create jobs, attract capital and talents, and promote the development of the area and the Country. The Start-Up Start-Hope Fund supports small innovative enterprises operating in Abruzzo, through participation in risk capital. Its first budget consists of €13,395,295.00. The evaluation process established by the Fund consists of three basic steps:

- 1. Pre-screening phase, merely formal, based on documentary;
- 2. Evaluation phase of merit, aimed to the technical analysis of the initiative;
- 3. Strategic evaluation phase, aimed to consider the strategic opportunities in the regional key context.

The transactions, which pledged the available plafond, were 27; with this study, we gather the detailed information of each transaction in order to produce a comprehensive empirical analysis on the creation of start-ups in Abruzzo. Based on the nature of the data to be analyzed, it was decided to have as a benchmark the methodology used by the Venture Capital Monitor, namely VeM (monitoring instrument of venture capital operations in Italy).

3.2. Empirical evidences emerged by the project

Start-up Status

The Start-up Start-Hope project has given flexibility to the start-ups relatively the legal status at the time of submission of the application. In fact, despite being required for the established start-ups the legal form of a capital company, it was also envisaged the possibility of welcoming business ventures even by incorporating start-ups. Running a first analysis of the available data on the distinction between established start-ups and incorporating start-ups, it is clear that this option has proved an interesting success. Among the considered 27 start-ups, in fact, 11 (41%) turn out to be the incorporating start-ups (Figure 1).

Moreover, examining the data on the intensity of the investments allocated to the two analyzed types, it shows that the established start-ups count in percentage, in terms of allocated resources, a more substantial amount of funds, accounting for 58.75% of the available amount against 41, 25% concerning the incorporating ones. The following graph on the intensity of resources and the distribution of the same between the two considered forms shows that, although the average investment is comparable, reaching the proximity to €500.000, the higher amounts in absolute have been conferred to the established start-ups. (Figure 2).

Start-Up Stage

A further distinction has been made in relation to the stage of life of the start-up, defined as 'firm stage' with respect to the validation of the product / market combination. For this purpose it has been used the well-known tripartite classification: seed capital, start-up capital, expansion capital. From data analysis (Figure 3), we can note that, in line with the trend noted by VeM for the investments in domestic venture capital, most of the operations fall within the macro-area defined "early stage," within which there is a high abundance of investments in seed capital.

Significant is the evaluation of the distribution of the resources, assigned within the identified market segments, as shown in the figure below (Figure 4). The graphic evidences point out that each of the observed categories, also, hosts those start-ups recipients of the higher amounts.

Such result confirms the necessity of conducting, in the analysis of small and new reality as the start-ups, evaluations of global character which keep in opportune consideration heterogeneous elements: from the background of the start-up - to the proponent team, from the expected profit - to the innovation of the business.

Investment type

The selected start-ups have also been divided keeping in mind the background of every one in comparison to the investment assigned to them by the Start-Hope Fund. The 27 investment transactions were divided: in "initial", when the Start-Hope Fund has represented, for the funded start-up, the first and only intervention; in "coinvestment" in the event that the selected start-up, in addition to the investment granted by the initiative Start-Hope, has been funded by other investors. This fact, besides allowing us a great knowledge of the examined situation, if observed in ampler sense and with the support of the geographical origin, it is also a revealing datum of the emergent network induced by the project in examination.

Figure 5 highlights, in fact, that on 22% of start-ups in the portfolio there has been a co-investment; this result, on the one hand, enhances the credibility of the selected start-ups since they are also accredited by other investors; on the other hand, and consequently, it certifies the affirmation of the Start-Hope Fund within the National Venture Capital environments.

Origin of the deal

The datum on the origin of the deal verifies the activity to which the realization of the operation is referable; to the light of this reference the start-ups in portfolio have been divided into the categories of: private enterprise, corporate spin-off, and academic spin-off. In light of the effected analyses, the entrepreneurial initiatives of private matrix are located as undisputed protagonists, both in terms of selected start-ups and in terms of funds destined to them. (Figure 6).

On this result that perfectly lines up it to the national trend on investments measured by VeM it is interesting to make two orders of considerations; first, as evident from the graph below (Figure 7), it is observed that, although in overwhelming minority, the only case definable as academic spin-off has been beneficiary of the highest invested amount. This evidence points out the promotion role and the reputation that the University has always fulfilled as an "incubator" of new ideas.

Allowed Investment

The amount available in the Start-Hope Fund, as noted, was of €13,395,295.00 and an equal number of funds were committed in the 27 selected operations. We remember that the maximum amount that might have been granted, in accordance with the public notice, was of €1.5M for start-up; within that value, the minimum involved amounts were in the proximity of €100.000 (unit of measure in the graph coded as k) and maximum of €1 Million. For the purposes of a more detailed analysis and a better understanding of the phenomenon, it has been made a breakdown of the commitments in five investment groups (Figure 8), respectively: investments of up to 200k, up to 400k, up to 500k, up to 700k and within the one million euro. Note also that, for all the selected operations, the Start-Hope Fund stood as "Lead Investor": that is, at closure of the assistance, the Start-Hope Fund will be the operator that has invested the largest share of venture capital in each of the deal made. From the allocation made for investment groups, it has become clear that the more "populous" grouphas been "up to 500k"; this amount approaches to the average amount invested for the transaction, measured in €496.122,04.

Economic sector of activity

The Start-Up Start-Hope project, as already mentioned, was applied to the small new start-ups, innovative in sectors both innovative and traditional. In this regard, by the results obtained from the investigated companies, the following six main areas were detected (Figure 9): ICT, agri food, industry, energy, medical, service.

It is evident that the ICT sector, in accordance with the national trend reported by VeM, is the sector most experienced by the start-ups. In this regard, it should be specified that the ICT, intended as a base technology incorporated into products and services, is a heterogeneous area that encompasses, within its structure, further sub-categories of services and / or products definable to various title "digital". We mention, for this purpose, the most common sub-categories in Start-Hope portfolio: web and mobile application, software application, analytic tools, platforms.

In light of the graph shown on the next page (Figure 10), it is interesting to note that, although the ICT sector is the most financed, the higher investment falls within the medical sector, followed by investments granted in favor of the start- up of service and energy sectors.

Estimated value of production

The estimated value of the production has been analyzed starting from the plans drawn up by the management of the start-ups for the three following annuity and taking into account the stage of the selected start-ups. Therefore, considering as year of reference the one of the application, in the case of seed capital, the perspective data for the third year following the same has been used, in the case of start-up capital, that of the second year, and in the event of expansion, that of the first year. The data obtained have been divided into the following five value ranges: up to 1.5M€ up to 2.5 M€ up to 3.5M€ up to 5M€ and more than 5M€ (Figure 11). Note that, in the established bands, it is not included the data related to the start-up of the medical sector since it is not estimable at today. The earning of this start-up, in fact, will be originated by the result of the sale of the research patent or by the commercial exploitation of the same and as such not easily predictable at present.

The graphs below (Figures 12 and 13), when compared with the previous ones, related to the agreed investment according to the sector and / or to the stage of the start-ups, detect the lack of a specific correlation among the examined variables; this testifies the peculiarities of the route and of the estimated outcomes proper of each reality.

For the purpose of a major completeness of exposition, in Table 1 are presented in detail the results and the information emerging from the analysis relating to each company investigated in this case study. In addition, Table 2 shows the main descriptive statistics for each variable considered in the empirical analysis, which detail further, what has been already stated above. A meaningful element to be noted makes reference to how the sample of the investigated companies has a degree of homogeneity sufficiently high to its internal, as shown by the results pertaining to the standard deviation and the sample variance.

4. Conclusions

The paper aimed to investigate the effectiveness and the experience of the supporting action of innovative startups in the Italian context. In particular, the study is focused on the analysis of the case study about the Start-up Hope initiative in the administrative region Abruzzo, in order to understand and encourage the existing entrepreneurship related to the creation of innovative start-ups. The reference sample of the analysis included a target of 27 companies selected by the Start-Up Start-Hope project and, for each of them; the critical elements of analysis have been explored, using as a benchmark the VeM methodology (the National Venture Capital Monitor). The empirical evidence points out that the Start-Hope Fund has really selected and supported the startups in areas both technological and traditional, including 19 extra-regional realities.

Besides, the promising perspective elaborations about the investments made, the estimated value of production and the involved human capital, attest the goodness and the promoting efforts of such typology of support to the innovative entrepreneurship. These findings acquire an additional meaning and relevance if supported by two concluding remarks. First, it must be considered that the start-ups, which have been developed within the analyzed regional context, are united by the collective needs related to the relationship and dialogue with the territory and they are focused on three critical and basic elements: where to live, where to work and where to find the human capital for the realization of their own business plan.

Second, the results of the case study have highlighted how it is possible to adopt different methods of supporting interventions together to emphasize the contextual conditions that favor their effectiveness. The emerging evidence may assist policy makers in the process of defining the public intervention methods aimed at reducing the typical financial gap of innovative start-ups, which limits their sustainable growth, both with reference to compatibility with the rules on State assistance within the European Union, both as regards the construction of a real action plan, which includes direct and indirect measures, from both the demand and the supply of funds for venture capital. Thus, more policies that are effective should include measures aimed at creating framework conditions that encourage the entry of more capable entrepreneurs and well prepared in the key business areas of innovation, such as the start-ups. In addition, the action plans must have well present the whole range of possible actions of financial nature, to identify those most suitable to the needs and the stages of the life cycle of the business venture.

However, while the study provides an effective contribution to literature about the innovative entrepreneurship development, our results should be considered only preliminary and they require a serious reconsideration of the assumptions that underpin the new programs supporting the venture start-ups. Therefore, a further investigation of the effectiveness of such programs, in the light of our results, may become an interesting area of research, and our wish is to encourage further exploratory efforts in this topic in rapid cognitive and applicative expansion.

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Figure 1: Analyzed Start-up Status

Figure 2: Investment distribution by start-up status

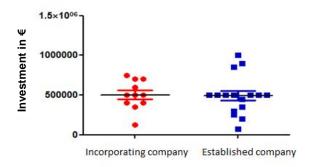


Figure 3: Stage of analyzed start-ups

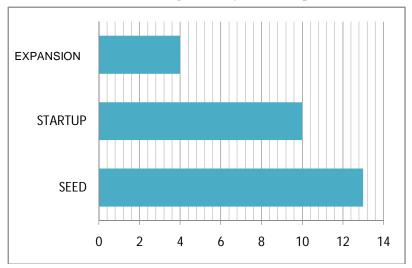


Figure 4: Investment distribution by start-up stages

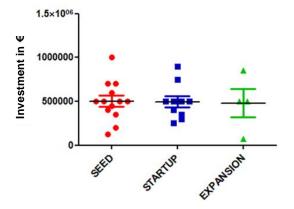


Figure 5: Typology of investment and geographical distribution

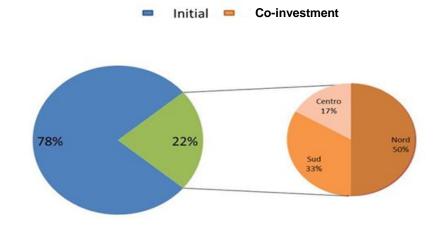


Figure 6: Deal origin of the analyzed start-ups

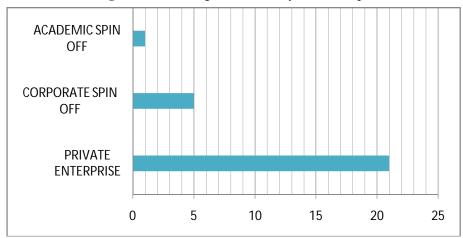
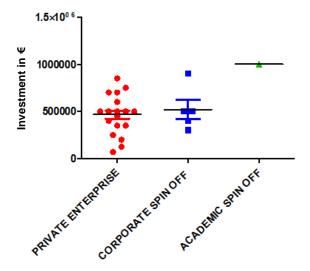


Figure 7: Distribution of the investment by origin of the deal



 $\textbf{Figure 8:} \ \, \textbf{Investment allowed for the analyzed start-ups}$

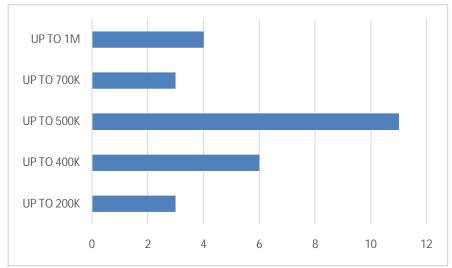


Figure 9: Sector of activity of the analyzed start-up

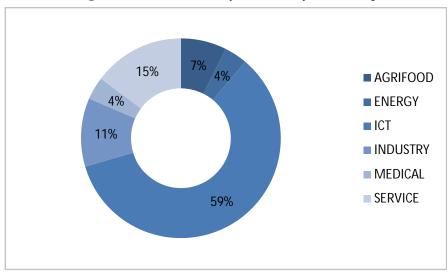
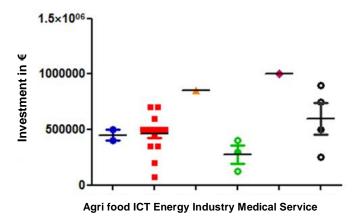


Figure 10: Investment distribution by sectors of activity



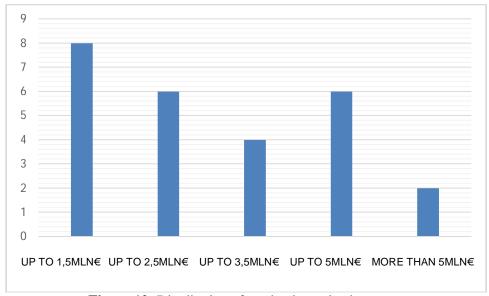
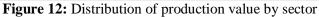


Figure 11: Estimated value of production of the analyzed start-ups



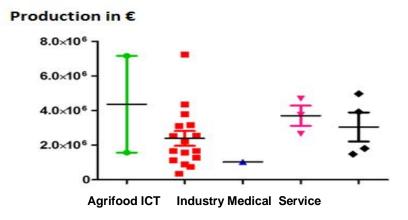


Figure 13: Distribution of production value by stage

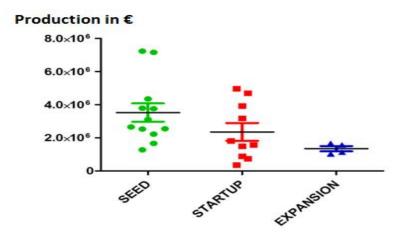


Table 1: Summary of the analyzed firms

Firm	Firm	Year	Investment	Initial	Co-	Innovati	Geographic	Avera	Numbe	Sector of	Statusex	Spin	Value
numb	status	of	allowed in	11111111	Investiment	ve	al origin	geage	rof	activity	ecution	Off	of
er		establi	€			startup		of	founde				produc
		shment						founde	rs				tion
								rs					1/2/3
													year in €
1	Established	2012		YES	NOT	YES	Centre Italy	49	4	energy	expansio	NOT	10310
1	Established	2012	850000.00	1123	NOI	1123	Centre Italy	49	4	energy	n	NOI	00.00
2	Incorporati		850000.00	YES	NOT	NOT	Abroad	38	5	ICT	seed	NOT	00.00
-	ng		700000.00	125	1,01	1101	(ilinois)	50		101	5000	1,01	43505
	company						,						80.00
3	Established	2012		YES	NOT	YES	Centre Italy	56	3	medical	seed	YES	0.00
			1000000.00				/Abruzzo						
4	Established	2013		YES	NOT	YES	South Italy	45	5	turism	seed	NOT	25313
			500000.00						_				17.00
5	Established	2013	500000 00	YES	NOT	YES	South Italy	28	2	digitalega	seed	NOT	31126
	T	2012	500000.00	Y PPO	NOT	TIPE	G . V. 1	20		ming		NOT	20.00
6	Established	2012	500000.00	YES	NOT	YES	Centre Italy /Abruzzo	38	9	ICT	seed	NOT	25477 55.00
7	Established	2013	300000.00	YES	NOT	YES	Centre Italy	42	8	service	ctortun	YES	14850
,	Established	2013	900000.00	1123	NOI	ILS	/Abruzzo	42	0	service	startup	1123	00.00
8	Established	2011	200000.00	YES	NOT	YES	South Italy	34	2	ICT	seed	NOT	00.00
Ü	Established	2011	500000.00	1 LD	1101	LES	Bouth Italy	5-1	_	101	seed	1101	22211
													00.00
9	Incorporati			YES	NOT	NOT	Centre Italy	48	4	ICT	startup	NOT	74634
	ng		600000.00								•		0.00
	company												
10	Incorporati			YES	NOT	NOT	Centre Italy	45	2	industry	seed	NOT	37569
	ng		126000.00				/Abruzzo						25.00
	company			Y PPO	NOT	NOT	G . Y. 1	4.5		4 4		NOT	52250
11	Incorporati		700000 00	YES	NOT	NOT	Centre Italy	41	1	digitalega	seed	NOT	72350 00.00
	ng company		700000.00							ming			00.00
12	Established	2012		YES	NOT	YES	South Italy	42	4	Ict	expansio	NOT	16640
12	Litabilished	2012	500000.00	ILS	1101	TES	South Italy	72	7	101	n	1101	00.00
13	Established	2011		NOT	YES	YES	North Italy	39	7	digitalega	expantio	NOT	15709
			500000.00							ming	n		67.00
14	Established	2013		NOT	YES	NOT	South Italy	36	4	digitalega	startup	NOT	31610
			500000.00							ming			27.00
15	Incorporati			YES	NOT	NOT	North Italy	46	2	service	startup	NOT	39237
	ng		750000.00										50.00
1.6	company			AZEC	NOT	NOT	G . T. 1	~ 1	1			VEC	26502
16	Incorporati		400000.00	YES	NOT	NOT	Centre Italy /Abruzzo	51	1	industry	seed	YES	26582 83.00
	ng company		400000.00				Abruzzo						65.00
17	Established	2013		NO	YES	YES	North Italy	43	3	digitalega	startup	NOT	34700
			350000.00							ming	r		0.00
18	Incorporati			YES	NOT	NOT	South Italy	30	3	agrofood	seed	NOT	71600
	ng		400000.00				1			"			00.00
	company												
19	Incorporati			YES	NOT	NOT	Centre Italy	30	2	digitalega	seed	NOT	37880
	ng		350000.00				/Abruzzo			ming			00.00
20	company	2012		MEG	NOT	VEC	0	40				MEG	46050
20	Established	2012	300000.00	YES	NOT	YES	Centre Italy /Abruzzo	40	2	industry	startup	YES	46950 00.00
21	Established	2014	300000.00	NOT	YES	YES	Centre Italy	49	5	service	startup	NOT	49715
41	Established	2014	250000.00	1101	1123	1 12/3	Centre Italy	77	,	SCI VICE	startup	1101	83.00
22	Established	2014	200000.00	NOT	YES	YES	North Italy	30	2	turism	seed	NOT	16640
	Locationed		200000.00	1,01	1.2	123	1.0	50	1 -		5000	1	00.00
23	Incorporati	1		YES	NOT	NOT	North Italy	34	1	agrofood	startup	NOT	18130
	ng	1	500000.00			1	ĺ			_			00.00
	company												
24	Incorporati			YES	NOT	NOT	Centre Italy	44	1	digitalega	startup	YES	88100
	ng		500000.00							ming			0.00
25	company		-	MEG	NOT	NOT	0	24	<u> </u>			MEG	15500
25	Incorporati	1	500000 00	YES	NOT	NOT	Centre Italy	24	2	agrofood	startup	YES	15703
	ng company	1	500000.00			1	/Abruzzo						07.00
26	Established	2013		YES	NOT	YES	North Italy	39	8	ICT	seed	NOT	12765
20	Zistaonished	2013	450000.00	120	1,01	11.5	1101th Italy	37		101	Secu	1,01	00.00
27	Established	2013		NOT	YES	YES	South Italy	32	5	digitalega	expansio	NOT	11299
			69295.00							ming	n		74.00
			13395295.0										71292
		<u></u>	0		<u></u>		<u> </u>					<u> </u>	028.00

Table 2: Descriptive statistics

	N	Interval	Min.	Max.	Mean		S. D.	Variance	
	Statistics	Statistics	Statistics	Statistics	Statistics	Errorstd.	Statistics	Statistics	
Status firmestablished	27.000	1.000	0.000	1.000	0.593	0.096	0.501	0.251	
Age	16.000	3.000	2.000	5.000	3.438	0.223	0.892	0.796	
Investmentallowed	27.000	930705.000	69295.000	1000000.000	496122.037	42533.325	221009.637	48845259804.345	
Initial	27.000	1.000	0.000	1.000	0.778	0.082	0.424	0.179	
Co-investment	27.000	1.000	0.000	1.000	0.296	0.090	0.465	0.217	
Innovative start-up	27.000	1.000	0.000	1.000	0.556	0.097	0.506	0.256	
Abruzzo	27.000	1.000	0.000	1.000	0.296	0.090	0.465	0.217	
Centre	27.000	1.000	0.000	1.000	0.185	0.076	0.396	0.157	
South	27.000	1.000	0.000	1.000	0.259	0.086	0.447	0.199	
North	27.000	1.000	0.000	1.000	0.222	0.082	0.424	0.179	
Abroad	27.000	1.000	0.000	1.000	0.037	0.037	0.192	0.037	
number of founders	27.000	8.000	1.000	9.000	3.593	0.441	2.291	5.251	
Age Founder	27.000	32.000	24.000	56.000	39.741	1.502	7.803	60.892	
Energy	27.000	1.000	0.000	1.000	0.037	0.037	0.192	0.037	
ICT	27.000	1.000	0.000	1.000	0.222	0.082	0.424	0.179	
Medical	27.000	1.000	0.000	1.000	0.037	0.037	0.192	0.037	
Turism	27.000	1.000	0.000	1.000	0.074	0.051	0.267	0.071	
Digital gaming	27.000	1.000	0.000	1.000	0.296	0.090	0.465	0.217	
Industry	27.000	1.000	0.000	1.000	0.111	0.062	0.320	0.103	
Service	27.000	1.000	0.000	1.000	0.111	0.062	0.320	0.103	
Agrofood	27.000	1.000	0.000	1.000	0.111	0.062	0.320	0.103	
Expansion	27.000	1.000	0.000	1.000	0.148	0.070	0.362	0.131	
Seed	27.000	1.000	0.000	1.000	0.481	0.098	0.509	0.259	
Status start-up	27.000	1.000	0.000	1.000	0.370	0.095	0.492	0.242	
Spin-off	27.000	1.000	0.000	1.000	0.222	0.082	0.424	0.179	
Value of production 1/2/3 year	27.000	7235000.000	0.000	7235000.000	2640445.481	359803.819	1869595.487	3495387285750.340	

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