Ministero dello Sviluppo Economico

ANNUAL REPORT TO PARLIAMENT

on the implementation of legislation in support of innovative startups and SMEs

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Italian Minister of Economic Development

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FOREWORD

Industry is experiencing a transformation that is unprecedented in its speed and pervasiveness. It has impacted every phase of the product life-cycle, from design through to production, distribution, retail and consumption. A common theme in this metamorphosis is the unstoppable ascent of the intangible component of our economy. The advance of digitalisation has fostered the development of rapid prototyping, advanced automation and 3D printing, the Internet of Things, the new data economy, on-demand production and the sharing economy.

We are now in the era of Industry 4.0, an irreversible transformation based on an increasingly strong collaboration between universities, research institutes, large companies, SMEs and innovative startups. It is the innovative startups that should be applauded for having proposed a new business model characterised by an ambition to achieve rapid growth, an international profile, a commitment to permanent innovation, and a propensity towards inter-sector influencing and open innovation. If these values become systemic, they will renew the whole of our business fabric, including the most traditional industries.

This new generation of businesses will leave its mark not only in cultural terms but most importantly in economic terms. Thanks to its approach towards technological innovation, and by experimenting with new business models, over the long term this will drive up production levels, competitiveness and efficiency throughout the manufacturing sector.

Four years after the launch of the Startup Act, Italian legislation is now recognised as one of the most internationally advanced for innovative business support strategies. Looking at the results of the Startup Manifesto Policy Tracker, published in March 2016, Italy is now in second place among the 28 EU Member States, in terms of the take-up rate of recommendations made by the European Commission on this issue.

The report confirms the growth of the Italian ecosystem, for example in terms of the number of startups recorded (+41% on the previous year), the human resources involved (+47.5%), the average value of production (+33%) and funding raised (+128%, considering access to credit via the SME Guarantee Fund.)

During the past year, we have continued our work to improve the regulatory context for startups, by introducing among other things a new form of online incorporation procedure, which has considerable advantages in terms of time and cost. The incentives available to innovative SMEs have been significantly boosted thanks to the extension of the free, simplified access to the Guarantee Fund. This means that SMEs now have easier access to funding during the startup phase.

In the last Finance Act, the Government renewed its commitment to driving up competitiveness across the national manufacturing sector, by accepting the policy recommendations in the Industry 4.0 Plan. The new measures include many that are of particular interest to startups and innovative SMEs: enhanced incentives for investments, the strengthening of tax credits for investments in research and

development, the creation of a new type of visa for investors, the possibility of transferring losses to publicly-listed "sponsor" companies even if they have a minority share in capital, and hyper-amortization for instrumental assets that enable the digital upgrading of production. This represents an unprecedented financial commitment.

What is now required is the contribution of stakeholders across the country in terms of engagement and communication, to transform the policy into a legacy that will generate tangible results for the competitiveness of industry as a whole.

This report is a tool that can be used not only to stimulate public debate and monitor the effects of the Italian Startup Act; it will also disseminate, on a large scale, all the benefits that our laws can offer those looking to innovate in Italy.

Minister for Economic Development
Carlo Calenda

SUMMARY

December 2016 saw the completion of the third edition of the Annual Report to Parliament of the Italian Ministry for Economic Development (MISE) on the implementation and impact of startup and innovative SME policies. The report consists of six chapters, and covers the period between 1 July 2015 and 30 June 2016, in some areas branching out into the second half of 2016 as certain types of data were only provided during the second half of the year.

The first chapter describes the main evolutions in the policy over the past year. The changes were introduced in order to boost the national system for business startups, and in some cases to promote innovative entrepreneurship as a whole.

The measures, which have been presented in chronological order of approval, are the following: the implementing Ministerial decrees on tax credits for R&D investments (par. 1.1) and the optional Patent Box tax rules applicable to income derived from the use of intellectual property (1.2), the ITA Service Card for innovative SMEs (1.3),the multimedia, bilingual online platform #ItalyFrontiers, the aim of which is to promote capital investment and encourage open innovation projects involving innovative Italian businesses (1.4), the renewed provision, under the 2016 Decree on Immigration Flows, for a preferential procedure for the granting of visas (Italia Startup Visa) and the conversion of permits to stay (Italia Startup Hub) for the self-employed, for non-EU citizens wanting to move to Italy or remain there to start up an innovative enterprise (1.5), the launch of a new simplified online company formation procedure that enables innovative startups to be incorporated as limited liability companies, offering significant time and cost reductions (1.6), reforms and simplification of equity crowdfunding regulations, following a large-scale consultation process involving the leading players in the system (1.7), the extension (until 2016) and the reinforcement of fiscal incentives available for investment in innovative startups (1.8), and finally, extension of the free, simplified access to the Guarantee Fund to include innovative SMEs in order to make it easier for them to obtain credit (1.9).

The second chapter contains a broad overview of the profiles and economic performances of innovative startups (2.1), certified business incubators (2.2) and innovative SMEs (2.3). The analysis is much more complex and in-depth for innovative startups, as these are the main targets of the measures launched in the “Growth 2.0” Decree Law 179/2012. Another reason why the analysis concentrates on innovative startups is that this type of company is now very common, and has achieved significant economic results, which are of interest to the community.

By mid-2016, three and a half years after the policy was launched, there were 5,942 innovative startups; 40% more than in the same period in the previous year, and as much as 160% more than the number recorded in mid-2014. Following the launch of the special section of the Business Register, the trend in new registrations has risen steadily, peaking at 248 startups registered in March 2016 (2.1.1). The failure rate, although up slightly on the previous year, is still notably low (1.1%); for the first time, statistics are also available on the rate of

business survival. In 95.1% of cases, the businesses were still trading three years after they were launched. This section also includes a number of companies that are no longer in the special section but still trading: in 2016, in 162 cases – almost two out of three – the company left the special section due to the maximum permitted time provided for by the law (2.1.2), having elapsed.

In mid-2016, there were 13 provinces with more than 100 innovative startups in their territory. 44% of innovative startups were headquartered in one of the three main regions – Lombardy, Emilia Romagna and Lazio (2.1.3). The legal form most commonly used by a startup is a limited liability company (80%), followed by the "simplified" variant (15%) (2.1.4).

The statistics on total workforce are significant. On 30 September 2016, there were 23,045 operational shareholders, and 9,042 employees. Between June 2015 and June 2016, the increase in the number of people directly involved in an innovative startup was 47.5% (2.1.5). There is also a new study of the presence of legal entities in the corporate structures of innovative startups. There are corporate shareholders in 30% of cases, where the average nominal value of the shareholding was €31,687, giving a total value of 118 million of capital subscribed (2.1.6).

With regard to sector distribution, it is interesting to note that in the sectors indicated as R&D and software production in the 2007 Ateco classification, startups represented, respectively, 24% and 7% of all Italian joint-stock companies, compared to a general rate of 0.4% in September 2016. This figure has risen compared to the 0.35% for the end of December 2015. The innovation requirement that was most frequently selected by the innovative startups during self-certification (of the requirements listed in Art. 25(2)(h) Decree Law 179/2012) related to R&D costs (necessary in 62% of innovative startups). This is further confirmation that investments in intangible assets are a typical feature of this type of enterprise (2.1.8). In mid-2016 there were also 93 innovative social enterprises and 620 operating in the energy sector ("clean tech"). Considering the positive impact on the community that this type of company has, these categories qualify for an increased incentive for equity investors (2.1.9).

In 2015 financial statements showed a strong increase in the total value of production (from 320 to 600 million). This was determined not only by the increase in the number of startups and therefore the number of financial statements that were surveyed (from 2860 to 3853) but also the average value of production of companies having filed at least one set of financial statements (€152,000, 38,000 more than 2014). The rate of fixed assets to equity was also much higher than the average for joint-stock companies (29.4% compared to 3.3%). Considering only those companies operating at a profit, the ROI profitability indicators (0.11 compared to 0.03) and ROE (0.25 compared to 0.04) followed the same trend (2.1.10).

The analysis of economic indicators, in addition to the Chamber of Commerce data highlighted above, also contains the data supplied by the National Institute for Statistics (Istat). Although this data refers to a year earlier, it provides a more systematic record of the startups' performance, and enhances the analysis

particularly with regard to the number of employees and their pay (2.1.11). Finally, in response to a study on the websites of innovative startups, published by a consulting firm in March 2016, MISE found that the number of innovative startups registering their website in the Business Register is significantly higher compared to other joint-stock companies (64% compared to just over 2%). It was also found that this practice has followed a steadily-growing trend, starting from the introduction of the special section (15 percentage points higher than the start of 2016) (2.1.12).

Section 2.2 concentrates on certified innovative startup incubators and contains the figures from a study commissioned by MISE in mid-2016. This showed that the innovative startups featured in the study have, on average, a higher performance in terms of the growth of value of production (more than 15 percentage points) and in the number of employees (5 percentage points).

Section 2.3 concentrates on innovative SMEs. There were 204 in mid-2016. Most of them were located in Lombardy (23%). Given the lack of general and size criteria in the legal definition, some were also incorporated many years before the policy came into force (15, prior to 1990), with 40 of them having a value of production higher than €5 million (2.3.1). 49 innovative SMEs had also been registered in the special section for innovative startups in the past. The vast majority of these companies had exceeded the maximum time permitted to maintain this status (2.3.2). Paragraph 2.3.3 presents theories on the still-limited extension of these regulations. The main reasons seem to relate to the late entry into force of certain incentives, the fact that the legal concept of innovative SME does not correspond to an easily-recognisable archetype, the obligation to certify financial statements, and the lack of information that still limits the awareness of the legislation.

The third section summarises some of the main results of #StartupSurvey, the survey on innovative startups carried out by MISE and Istat between March and May 2016. The survey, the results of which will be published in full in a special report in January 2017, recorded various qualitative aspects that are not covered in the special section of the Business Register, which is updated weekly, or in the complex system of periodic innovative startup reports.

The first section of the survey is a snapshot of certain aspects of the human capital employed by innovative startups, and identifies potential social mobility trends. The second section concentrates on the financial capital, and attempts to describe the composition of sources of finance at the time of formation and in the development phase, as well as the methods used by entrepreneurs to secure funding. The third section contains a survey of the perception of startups, the type of innovation they use, and their knowledge of intellectual property defence strategies. Finally, the fourth section aims to measure the level of information and knowledge of incentives available for business startups. The companies were also given the opportunity to make their own policy suggestions.

#StartupSurvey is certainly the largest qualitative survey ever conducted on Italy's innovative startups. It received no fewer than 2,250 replies, which corresponds to 44% of the innovative startups recorded at the end of 2015.

The replies to the first section of the questionnaire, given in par. 3.1 of this report, offer a broad overview of the characteristics of innovative startup shareholders. On average, there are 4 per company. The vast majority are male (only 18% are women), with a fairly high average age (42), with at least 7 out of 10 being graduates. Relatively speaking, female shareholders are younger and have linguistic skills and qualifications (78% of women hold a degree compared to 72% of men). The shareholders come from a very wide background: one of the most interesting results is that 34.7% of shareholders were previously employed, before launching the startup. The founder shareholder indicated that their father was a businessman in only 34.3% of cases. The employees – 2.5 per company, to which is added, on average, 1 "atypical" worker, mostly a project worker – are on average very young, with 48% aged under 34. They have a distinct technical/engineering profile (45.5%).

In the second paragraph of the third section it emerges that, on startup, innovative businesses mainly use their own funds to finance themselves. Although self-financing is the main source, this form of funding tends to reduce its ratio to capital. Although bank credit is some considerable way behind, it is placed second among the most common sources of funding, far higher than risk capital, for example. A significant number of startups confirmed they were satisfied (34.1%) or partially satisfied (44.2%) with their financial condition (3.2).

The answer to the third section of the survey (3.3) showed that startups invest a larger share of their funds in R&D (no less than 74.6% of costs, on average), but they also raised the issue of knowledge of intellectual property defence strategies: many companies, particularly smaller ones, said that they were interested in this area but had no knowledge of it.

Looking at the answers to the fourth and final section of the questionnaire, it can be seen that the most popular incentives among innovative startups include free, preferential access to the SME Guarantee Fund, and the tax credit for R&D investments. It was also found that accountants were a vital source of information about incentives for more than 60% of startups. Of the almost 1,000 policy suggestions that were received, many were generic (e.g. reduce red tape costs, and taxation), but there were also a number of specific proposals such as a request to limit the use of competitive procedures in which funding is received in the form of reimbursement of expenses, and the introduction of specific tax exemptions during the early stages of activity, such as the minimal national insurance contribution (3.4).

The fourth section of the report provides a quantitative measurement of the use of incentives under the innovative startup policy, and other measures for the development of innovative entrepreneurship, outside of the ambit of Decree Law 179/2012. Many of the figures recorded refer to 30 June 2016, except in certain cases, specified in the text, in which the figures were only available for earlier or later dates.

An initial example relates to the performance of the new form of incorporation procedure for innovative startups, introduced on 20 July 2016. On 30 September, there were 57 innovative startups that had completed their bylaws and

memorandum of incorporation on a website using a digital signature, which gave them a considerable saving both in terms of cost and time (4.1).

Section 4.2 presents the last available data (2013) relating to tax credits for the hiring of highly qualified personnel (CIPAQ), valid for the three year period 2012-2014, which the startups were allowed under the terms of Decree Law 179/2012, on a preferential, simplified basis. The most recent figures relate to the contract of employment stipulated in 2013. 77 contracts were agreed, by 43 startups. The total sum covered by the incentive was €920,000, a good part of the €2 million reserve set aside for innovative startups and certified incubators.

On 30 June 2016, no fewer than 1,050 innovative startups had access to the SME Guarantee Fund, with a total of 240 million in bank finance being received. The average was just over €250,000. Most loans are duly repaid (67.5%): the number of transactions already concluded successfully (4.5%) was encouraging, while there were few cases of non-performing loans (5 in all) (4.3).

The figures for the tax incentives on investments in innovative startups relate to 2014 as they were obtained from the Revenue Agency in the income tax returns for the following year (2015), which are made public about 18 months after the incentive is granted. Compared to 2013, there was an increase in terms of the total amount invested, both by individuals (+12.7 million) and by legal entities (+3 million). The number of startups receiving investments has also increased significantly (+177 from individuals, +61 from legal entities). Finally, it can be seen that around half the special-rate investments were located in the north-west, although the first signs of positive movement were also recorded in the south of Italy (4.4).

Equity crowdfunding operations saw a considerable increase in the last year. The Milan Polytechnic Observatory on Crowd Investing highlighted that the total receipts reached €5.6 million, an increase of 140% compared to mid-2015 (4.5).

The Italia Startup Visa programme also recorded sharp increases in numbers, with 132 applicants from 29 countries recorded on 31 August 2016 (4.7). 88 applications were received during the Report period, of which 15 in May 2016 alone.

The Smart&Start Italia programme is now in its second year of operation. As of 30 June 2016, 239 innovative startups have been funded by a cumulative total of €118.5 million (4.8).

Strong potential for growth of the system can be found in Invitalia Ventures, which together with the Italia Venture Fund co-invests with private players in high potential startups drawing on an initial endowment of 50 million, which was subsequently increased to 65 million. In the first year of operation the fund invested in five startups, for a total of 10.5 million (4.9).

The contribution of the Italian Investment Fund has also been important. It operates as a “fund of funds”, by feeding-in capital for institutional investors who are committed to startup funding activities. The two vehicles used for investments in venture capital funds (FII Venture and FOF VC) contributed to the funding of 9 companies – plus another 2 operations at the formalisation stage –

giving a total of 152 million. They act as anchor investors to attract other players on the risk capital markets such as the European Investment Fund (4.10).

At European level, the SME Instrument of the Horizon 2020 programme is an important source of funding for hi-tech businesses. Two years since its launch, it has provided funding for 60 innovative Italian startups in phase 1 (a grant of €50,000), while 13 have received finance of up to 2.5 million in phase 2, for development of the business. Of these, six companies have won both phases (4.11).

Finally, the cycles of the four Contamination Labs (spaces created within universities to encourage the transfer of students' knowledge and to promote a business culture) came to an end in mid-2016. The Contamination Labs were part of the "startup" competition announced in 2013 by the Ministry for Education, Universities and Research (MIUR), which incorporated a policy formulated by MISE. Four new CLabs were created during the past year. They are self-funded by universities, with similar characteristics to those that are government-funded policy (4.12).

The fifth section describes the institutional communication and policy promotion projects for innovative startups, carried out by MISE in the past year. The first and most important channel of information is the explanatory guides, graphic presentations and informative brochures on how to use the specific measures. Many of these brochures are also published in English, by the Directorate General for Industrial Policy, Competitiveness and SMEs. They are published on the Ministry's website (5.1).

A new initiative was launched in March 2016 when, in collaboration with InfoCamere, the information company of the Chamber of Commerce system, the Ministry launched a study of potential startups and innovative SMEs by filtering the companies on the Business Register, based on the legal requirements. This process identified almost 5000 potential innovative startups and more than 23,500 innovative SMEs which were not registered in the special sections. These companies were contacted by email and informed that they could potentially meet the legal requirements for eligibility for the incentives, which they were probably unaware of (5.2).

The email accounts dedicated to policies on innovative startups, innovative SMEs and the Italia Startup Visa are an important means of direct communication between the Ministry and innovative startups, their consultants and the other players in the innovation ecosystem. During the reference period, the accounts recorded 798, 260 and 205 emails respectively, insisting of enquiries about the requirements and incentives available under the law. During the four years of operation, the email account startup@mise.gov.it alone received 2,811 messages of this type (5.3). This section also reports on the formal interpretation of more complex aspects of the policy by means of published opinions and circulars (5.4), and on the visitor statistics for the institutional website – the portal of the Chambers of Commerce startup.registroimprese.it, the sections of the MISE website reserved for startups and innovative SMEs, and the portal for the Italia Startup Visa and Hub programmes (5.5).

SUMMARY

This section contains a detailed report of the initial results of the #ItalyFrontiers platform, on which 263 startups and 25 innovative SMEs had completed and digitally signed their profiles, by October 2016. Each profile contains detailed information about the company's activity, its personnel and funding requirements, its markets of interest and its affiliation to industry associations or certified incubators (5.6). Finally, there is a presentation of a new institutional activity, the Easitaly roadshow, organised by the National Agency for the Attraction of Investment and Business Development, Invitalia, in collaboration with MISE (5.7).

The sixth chapter, one of the novelties in this year's annual report, relates to the first few years of assessing the policy was to get impact. This activity has been limited by the short period of time in which the incentives have been in operation, for a significant number of recipients. For now, this has prevented Istat from identifying a causal relationship with unequivocal statistical interpretation in terms of the action of the policy and the economic performance of the beneficiary companies.

However, this year has seen the publication of a number of particularly interesting studies. The first of these is a study by the Milan Polytechnic (6.1), leading to the impact of incentives on the funding trends for innovative Italian startup. In particular, the survey explored the possible interdependencies between access to bank credit and recourse to the risk capital market. The second contribution, which is a result of the Bank of Italy's research (6.2), has a more holistic approach and offers an impact assessment of the whole package of incentives on the financial structure of innovative startups, their investment capacity, and various growth indicators.

AUTHORS AND ACKNOWLEDGEMENTS

This Report is the result of a collective effort involving no fewer than 20 organisations. It was coordinated by Mattia Corbetta of MISE's Directorate General for Industrial Policy, Competitiveness and Small and Medium Enterprises (DGPICPMI), led by the Director General, Stefano Firpo.

Unless otherwise specified, the authors of this work are Mattia Corbetta and Roberto Volpe, also from DGPICPMI. They are also the editors of this text.

Other authors are Enrico Martini of the Ministry's Technical Office (par. 2.1.2, 3.2, 4.4), and, for Division VII – SMEs, Innovative Startups and business networks (DGPICPMI), Piergiorgio Saracino (par. 2.1, 2.3, 4.3), Paolo Carnazza (par. 2.1, 2.2, 3.3) and Valter Canavese (par. 2.2).

As the implementation of this policy involves a broad, varied range of public and private players, several parts of this Report were prepared by non-MISE authors: Silvia Carbone and Davide Zaottini of Consob (par. 1.7), Fabio Bacchini, Alessandro Faramondi and Caterina Viviano of Istat (par. 2.1.11, 3.1), Giancarlo Giudici, Luca Grilli and Emanuele Giraudo of the Milan Polytechnic (the former for par. 4.5, all three for par. 6.1), Fernando Pastore and Armando Paschetta of ITA (par. 4.6), Alfredo Bruni, Andrea Miccio, Giuseppe Lazzara and Massimo Marseglia of Invitalia (par. 4.8 and 5.7), Salvo Mizzi and Ciro Spedaliere of Invitalia Ventures (4.9), Luigi Tommasini and Simona Corno of the Italian Investment Fund (4.10), Paolo Finaldi Russo, Silvia Magri and Cristiana Rampazzi of the Bank of Italy (par. 6.2).

Special thanks also go to those whose information provided a decisive contribution to the wealth of information on which this Report is based: Luigi Marangon, Elena Proietti, Antonio Benfatto, Massimiliano Boccadamo and Giulia Gelain of InfoCamere, and Pierluigi Sodini of UnionCamere (par. 1.6, 2.1, 2.2, 2.3, 4.1, 5.2, 5.5, 5.6), Paolo Brunozzi and Luca La Ragione of MedioCredito Centrale (par. 4.3).

The DGPICPMI would like to thank its colleagues from other divisions of MISE who contributed to this work: Marco Maceroni, director of Division VI – Register of Companies, the Market Directorate-General (par. 1.6 e 5.4), Flavia Gerardi of Division VI – Tax incentives and access to credit, of the Business Incentives Directorate-General (par. 4.2), Francesco Lutman of Internet Publication (5.5), Vittorio Taddeo, Stefano Di Giovanni and Maria Letizia Caterini of Division V – Information Systems, part of the Directorate General for Resources, Organisation and Budget (par. 5.5). Thanks also go to Marielda Caiazzo and Susanna Gallini for the final revision of the text.

Finally, we would like to thank the contacts from the eight Contamination Labs who contributed to par. 4.12: Chiara Di Guardo (Cagliari), Donato Iacobucci (Ancona), Pino Rossi (Cosenza), Lello Savonardo (Naples), Claudio De Capua (Reggio Calabria), Alessandro Rossi (Trento), Vincenzo Catania (Catania), Antonio Campati (Catholic University of Milan), and Roberto Pagnani from the Ministry of Education, Universities and Research.

Any errors and omissions are attributable exclusively to the Ministry for Economic Development.

1 A YEAR OF POLICIES FOR INNOVATIVE STARTUPS AND SMES: MAIN DEVELOPMENTS

Table 1.a: Developments in policies for innovative startups and SMEs

	TYPE	SUBJECT	DATE
1	Decree of the Ministry for the Economy and Finance, jointly with the Ministry for Economic Development	R&D Tax Credit	27 May 2015
2	Decree of the Ministry for Economic Development, jointly with the Ministry for the Economy and Finance	Patent Box	30 July 2015
3	Decision of the ITA agency	Innovative SMEs Service Card	22 September 2015
4	Promotional campaign	#ItalyFrontiers	13 November 2015
5	Decree of the President of The Council of Ministers (2016 Decree on Immigration Flows)	Determination of immigration flows for non-EU citizens, including provisions for Italia Startup Visa and Hub	14 December 2015
6	Decree of the Minister for Economic Development	New online procedure for incorporating innovative startups as limited liability companies (s.r.l.)	17 February 2016
7	Consob Resolution	Update to the regulations on equity crowdfunding	24 February 2016
8	Decree of the Ministry for the Economy and Finance, jointly with the Ministry for Economic Development	Improvements and extension to 2016 of the tax incentives for investment in innovative startups	25 February 2016
9	Decree of the Ministry for Economic Development, jointly with the Ministry for the Economy and Finance	Free, preferential access to the SME Guarantee Fund, for innovative SMEs	23 March 2016

For a comprehensive overview of the main public policies launched in the reference year, to support innovative businesses, it is necessary to go back to the end of 2014. With the Law 190 of 23 December 2014 (the "2015 Stability Act"), Parliament introduced changes (Art. 1(35)) to the rules on tax credits for investments in R&D (CIR&S) and introduced (Art. 1(37-45)) optional taxation rules for income derived from the use of intangible assets (Patent Box). These two fiscal measures incentivise investment in innovation by any Italian company, but by their nature they are particularly important for startups and innovative SMEs.

1.1 R&D TAX CREDIT

From a regulatory viewpoint, the rules on the CIR&S, which were already introduced in Article 3 of decree-law 145/2013 (the "Destination Italy" decree) and as mentioned reinforced with the 2015 Stability Act, were fully implemented on 29 July 2015 with the publication, in the Official Gazette ("Gazzetta Ufficiale"), of the Decree issued jointly by the Ministry of the Economy and Finance and the Ministry for Economic Development on 27 May 2015.

The Circular 5/E issued by the Revenue Agency on 16 March 2016 clarified executive aspects of the new CIR&S rules, while in the explanatory brochure published on 31 March 2016, the DG Industrial Policy, Competitiveness and SMEs at MISE publicised the new regulations.

In essence, the tax credit is available to companies investing in R&D up to a maximum annual amount of €5 million, per beneficiary. The period of validity is the five year period 2015-2019. 25% of the incentive is recognised under annual expense increments – for costs of at least €30,000 – in R&D operations compared to the average costs accruing in the three previous tax years, preceding the one in progress on 31 December 2015 (2012-2014). The fiscal benefit rises to 50% for investments in R&D relating to the hiring of highly qualified personnel or "extra muros" research costs, in other words work carried out in collaboration with universities or research institutes, and with other companies such as innovative startups.

A distinctive feature of this measure is the increase in the fiscal benefit for R&D investments that is earned through reliance on third parties. This is intended to favour open innovation, through which mature businesses can pursue competitiveness policies by outsourcing innovation processes to specialised centres such as research institutes, universities spin-offs and innovative startups. Boosting the level of interaction between traditional business and the new generation of innovative enterprises is one of the economic policy objectives pursued by MISE.

1.2 PATENT BOX

As already mentioned, the 2015 Stability Act also introduced Patent Box rules into Italian law. From 2015 onwards, businesses will have the option of tax-exempting up to 50% of the income derived from the commercial exploitation of intangible assets.

The Decree issued on 30 July 2015 by MISE jointly with the Ministry for the Economy and Finance (MEF) defined the implementing provisions which were further clarified by Circular 11/E issued on 7 April 2016 by the Revenue Agency.

The incentive also covers income derived from the use of intellectual property, industrial patents for inventions, utility models and complementary protection certificates, trademarks, designs, models, company information and technical/industrial know-how, provided that they can be protected as secret information according to the legal definition: this is intended to mean patented intangibles, or assets that have been registered and are awaiting a patent.

The aim of the policy is to make the Italian market more attractive for national and foreign long-term investment, while protecting the Italian tax base. The incentive encourages the placement, and preservation in Italy, of intangibles that are currently held abroad by Italian or foreign companies, and also favours investments in R&D.

Italy's Patent Box is in line with the series of models introduced in other EU Member States, (Belgium, France, Luxembourg, the Netherlands and Spain) and conforms to the OECD Guidelines.

The paragraphs below contain an analysis of the system of policies related strictly to the legislation to which this Report relates – laws on startups. The starting point is the decree-law 179/2012, known as the "Growth 2.0" Decree, converted with amendments by Law 221/2012 – and on innovative SMEs – the already-mentioned Investment Compact. Two meta-laws designed to boost the international projection of innovative Italian companies are described below.

1.3 THE ITA SERVICE CARD FOR INNOVATIVE SMES

Similarly to what was already available for innovative startups from July 2013 on 22 September 2015, the Italian Trade Agency (Italian Agency for the International Promotion and Internationalisation of Italian Business) determined, in its decision 289/15 the issue of the Innovative SME Service Card. The Card provides for a 30% discount on services provided by the Agency with regard to regulatory, corporate, fiscal, real estate, contractual and credit matters. In this context (with reference to Article 30(7) of the Growth 2.0 Decree), the Investment Compact also provided that ITA would take steps to encourage meetings with potential investors, also for innovative SMEs.

1.4 #ITALYFRONTIERS

#ItalyFrontiers is one of the most experimental policies launched in the report. It is based on the assumption that registration on the Business Register, which businesses often see as a purely bureaucratic measure, can become a tool for the relational economy and for marketing, thus creating business opportunities.

Organised by the Chamber of Commerce's IT parent company, InfoCamere, and supported by MISE and UnionCamere, the Italian Chambers of Commerce Union, #ItalyFrontiers is an online Italian-English platform, reachable through search engines, through which startups and innovative SMEs can improve their online visibility and boost their international profiles.

Each business has its own dedicated page, in two sections: one with fixed content that is generated automatically from the official data on the Business Register, while the other can be customised with multimedia functionality and is compiled on a voluntary basis.

In detail, the first section contains the data taken from the special sections of the Business Register reserved for startups and innovative SMEs which are already published free of charge in table format, updated weekly. This section offers

a broad range of information including company name and address, date of incorporation, sector of activity, size of workforce, capitalisation and value of production.

As mentioned, completion of the second section is voluntary. It incorporates a wealth of information about the development of the business, team profile, type of product/service, funding requirements, the capital sourced and the reference market. The company can also enhance its profile with video content. Once signed with digital signature by the company's legal representative, as indicated in the compilation guide, this second type of information can be accessed on the company's public profile.

Up to three self-descriptive tags can also be included. The tag tool can be used to illustrate the company's activity more accurately than is currently permitted by the Ateco 2007 coding system, as it highlights the link to the latest technological trends (such as #Cleantech, #InternetOfThings, #BigData).

Collectively, these webpages give the company an excellent online portfolio, which can be viewed by established businesses looking to forge connections based on open innovation, and they also attract Italian and foreign investors looking for new opportunities. Potential investors can carry out targeted searches by filtering the search data using each of the above criteria. The real strength of #ItalyFrontiers is that it brings together, on a single portal, all the information about startups and innovative SMEs in Italy. Once the companies of interest have been identified, it is easy to contact them thanks to the website and social network links on the profiles.

1.5 ITALIA STARTUP VISA AND ITALIA STARTUP HUB: 2016 DECREE ON IMMIGRATION FLOWS

The Decree of the President of the Council of Ministers of 14 December 2015 (2016 Decree on Immigration Flows) made provision for the temporary management of non-EC workers entering Italy and renewed the Italia Startup Visa and Hub programmes for the current year.

Launched by MISE on 24 June 2014, Italia Startup Visa introduced an online fast-track procedure (it take no more than 30 days to complete) which is also centralised (the Ministry coordinates both the applicants' evaluation committee which consists of representatives of national innovation associations and also the administration process with the Police headquarters responsible for security checks and diplomatic/consular bodies) for the purposes of granting immigration visas for non-EU self-employed workers who intend to launch an innovative startup in Italy, either individually or as part of a team. The underlying idea, which is the result of a study of international best practices, is based on the belief that the interaction of skills generated by the meeting of business cultures from different countries is one of the keys to success for the largest ecosystems of innovative entrepreneurship, and that qualified immigration is an opportunity for the socio-economic development of our country.

Italia Startup Hub was launched on 23 December 2014, based on the model of Italia Startup Visa. The fast-track procedure mentioned above was also extended to non-EU nationals with regular permits of stay obtained for study reasons, who intend to remain in Italy after their permits have expired, in order to launch an innovative startup. This method allows them to convert their permit of stay into "permit for independent startup employment" without having to leave the country. They can benefit from the same simplified procedure that applies to the granting of startup visas.

1.6 NEW ONLINE INCORPORATION PROCEDURE FOR INNOVATIVE STARTUPS

One of the most notable measures launched in the Reference period was the Decree of 17 February 2016. In implementation of Article 4(10) of the Investment Compact, MISE introduced a new, pioneering process for the registration of an innovative startup, in the form of a limited liability company.

The most innovative aspects of this new process are:

- It is free: apart from the tax levied on the registration document, there are no specific costs involved in setting up the new company, thus allowing entrepreneurs to save money;
- There is no intermediation: there is no need for an intermediary to verify the identity of the individual signing the document, which is guaranteed by the obligatory digital signature;
- The parties can draw up and sign the deed of incorporation and bylaws online, using a dedicated *web platform* which can also be saved and re-saved;
- The use of a standard form of deed of incorporation and bylaws, which can to some extent be customised by the business owner;
- The XML editable format of the document, which conforms fully to the standard model and enables a series of automated controls to be carried out on the data, and the inclusion of new, structured information on the Business Register;
- It is voluntary; Business owners can choose between the ordinary public deed procedure, and the new process.

The decision to concentrate the implementing decree on the "srl" (limited liability company) was made for two reasons: firstly, the large number of startups that are set up in this format is consistently more than 80% of the total; secondly, consideration was given to the particularly favourable rules applied by the government to innovative startups set up in this way. They have the possibility, which is otherwise limited to "SpA" (public limited companies) to include categories of shares with special rights (for example, they can issue shares with no voting rights or with voting rights disproportionate to the shareholding), carry out share transactions, issue participatory instruments and offer shares of capital to the public.

The provisions of the Ministerial Decree became fully operational from 20 July 2016, through the Decree of the Directorate General for Markets, Competition, Consumers, Supervision and Technical Regulation, and the related Circular 3691/C of 1 July 2016.

BOX 1. The new, free online "srl" formation procedure for innovative startups: the process (summary of the Guide)

1	**Technical requirements**	Workstation (Internet connection, up-to-date browser, PDF reader). Certified email address. Digital signature for each signatory. Account authorised to send Standard Communication correspondence (to register the innovative startup on the Business Register): this can be obtained by registering at http://registroimprese.it/ or through a consultant or business organisation.
2	**Accessing the application**	Through the "Create your startup" link on the website http://startup.registroimprese.it/.
3	**Compiling the form**	The form consists of two electronic documents in XML format, whose print standards conform to the Ministerial Decree: 1. Deed of incorporation; 2. Bylaws. Users can save the document during the compilation process. The Check function allows users to verify: • That the mandatory fields have been completed; • That the data has been input in the correct format; • That the data included in the deed of incorporation matches the data in the bylaws. The coordinates of the field in which any error was detected will be highlighted, together with an alert message.

BOX 1. The new, free online "srl" formation procedure for innovative startups: the process (summary of the Guide)		
4	**Fiscal registration of the form**	Once the two electronic documents have been compiled and digitally signed, the form needs to undergo fiscal registration. Using the registration function on the platform http://startup.registroimprese.it/ the Revenue Agency can be provided with the following documents: • The form, consisting of the two XML documents digitally signed by the parties; • The PDF file containing the printout of the form; • Form 69 (Registration application) completed in accordance with the instructions in the "Guide to fiscal registration" in the Guide section; • The receipt for payment of the registration tax. On receipt of the form, the Revenue Agency will return the fiscal registration receipt to the certified email address indicated in the application for registration.
5	**Sending the form to the Business Register**	The signed, registered form must be sent to the Company's Register office within 20 days from signature, according to the standard application for registration process. The following documents must be attached: • The digitally-signed deed of incorporation and bylaws; • The registration receipt from the Revenue Agency, digitally signed by the legal representative; • A self-certification of compliance with the requirements for an innovative startup, with the digital signature of the legal representative; • The interim financial statements, digitally signed by the legal representative, if self-certifying possession of the requirement regarding allocation of 15% of the higher of the costs and total annual value of production, to R&D costs; • The Social Impact Description Document, if the enterprise is classified as an innovative social enterprise.

BOX 1. The new, free online "srl" formation procedure for innovative startups: the process (summary of the Guide)		
6	**Specialised assistance**	Unioncamere and InfoCamere have set up a free customer service, initially available until 30 September 2016 and then extended until 9 November 2014 and subsequently until 13 December 2016, through which the user can obtain qualified, direct assistance with the startup process, after completing the deed of incorporation and bylaws. The assistant service will first of all check that the form has been compiled correctly, together with the attachments and other information provided for registering the company on the Business Register, and in the special section for innovative startups. If the information is all correct, the service will then provide the pre-compiled standard communication in a protected area of the site. The user will be asked to complete the fiscal registration of the form and then send it to the Business Register as described in paragraphs 4 and 5.

BOX 1. The new, free online "srl" formation procedure for innovative startups: the process (summary of the Guide)		
7	**Checks by the Chamber of Commerce**	The Register office of the Chamber of Commerce will carry out the following checks: a. That the deed of incorporation and bylaws conform to the standard model; b. That the form has been signed correctly with a digital signature by all signatories, as required by Article 24 of the Digital Administration Code; that the company has a unique certified email address; that the signature is genuine; that the form has been sent to the correct office; c. That the deed qualifies for the innovative startup regulations; that the company object is lawful, feasible and can be determined, and that the main or exclusive activities are the development, production and marketing of innovative products or services with a high technological value; the simultaneous filing of the application in the special section for innovative startups; d. Fulfilment of the obligations contained in Title II of Legislative Decree no. 231 dated 21 November 2007 ("Anti-money laundering Decree") as amended. If the above checks are successful the office will then proceed with the temporary registration – within 10 days from the protocol date – in the ordinary section of the Business Register. If there are formal irregularities, the office will suspend the registration process and will set a deadline of no more than 15 days within which to rectify the matter. If the procedure is not regularised within that period, the Registrar may refuse, with justification, to register the company in the ordinary section. Once all the legal checks have been carried out, the innovative startup must be entered in the special section within 30 days. This will make the provisional registration in the ordinary section definitive. Non-registration in the special section of the Business Register will result in a rejection of the registration in the ordinary section.

On 4 May 2016, the National Council of Notaries ("CNN") filed an objection with the District Court of Lazio against the MISE decree of 17 February 2016, highlighting the need for the decree to be suspended provisionally by the court. On 19 July 2016 the CNN lodged a new appeal, containing additional grounds compared to the main appeal and independently challenging the orders.

On 19 July 2016, the district court rejected the interim appeal, adjourning the matter for a collective ruling on 30 August 2016. On that date, the district court ruled that the case could only be decided after an in-depth examination of the merits, and not in summary proceedings, setting a date for hearing on the 15 February 2017.

The grounds for the appeal relate to multiple issues, starting with the fact that according to the CNN, these measures conflict with the general principle of hierarchy of sources. The CNN complains that the Ministerial Decree has violated the provisions of the decree law no. 3 of 24 January 2015 converted with amendments by law no. 33/24 March 2015 (Investment Compact), by providing that the new online incorporation procedure is exclusive, whereas under the primary legislation it is an alternative to the traditional public deed procedure.

The counter-arguments raised by MISE, (the Directorate General for Markets, Competition, Consumers, Supervision and Technical Regulations) highlight the falseness of these accusations, given that in no part of the text does it state that the new procedure would be considered exclusive.

According to the appellants, the decree also violates the provisions on the formation of deeds, and the European laws (Directive 2009/101/EC) on public limited companies and limited liability companies. The Ministry objected to these arguments, stating that the Decree of 17 February 2016 did not introduce anything new in addition to the checks usually carried out by the Business Register office, that the new procedure may be more detailed but it is still within the ambit of "formal legality", which is something for which the Office has been responsible since its foundation.

Added to this is the anti-money laundering and antiterrorism check, which faithfully enacts the 4th EC money-laundering Directive and the FATF[1] Guidelines, to which Italy adheres.

With regard to the alleged conflict between the delegated law (and therefore the delegated decrees) and the principles of Article 11 of Directive 2009/101/EC, the Minister highlights that since 1968 the EC regulations have provided for an alternative between three systems: judicial control, administrative control or, in the absence of both, a public deed. As usual, the EC regulations stipulate the minimum levels to be adhered to by the national governments, subject to the fact that provision may be made for triple controls (as was the case in Italy until the year 2000 – Law 340/00) or dual controls (as is currently the case in Italy, or single controlled (as is the case innovative startups according to the laws of many civil law European countries).

According to the CNN, the possibility of forming a startup without a notarial deed weakens the controls on the time that the company is formed, leading to possible abuse of the corporate vehicle as there are no controls on the exact identity of the parties to the deed of incorporation, the real ownership of the underlying relationship, the legality of the statutory clauses and compliance with the rules on anti-money laundering.

According to the Ministry, the parties' identity is already guaranteed by the obligatory use of the digital signature, which is issued on demand and by the additional checks identified in the Ministry's Circular 3691/C, again within

1 Global intergovernmental organisation created within the OECD with the aim of developing and promoting strategies to fight money laundering both nationally and internationally.

the limits of the formal checks such as those on nationality and therefore the possession of authorisation for resident foreigners (or alternatively the condition of reciprocity), the legal condition (capacity – financial situation in the case of spouses), which can be deduced from the civil registers and with reference to anti-money laundering, the carrying out of all the checks (criminal records, anti-Mafia, Protests register) which can be searched directly by the Business Register office. This makes the investigations more advanced than those hitherto carried out by other professionals who cannot access these databases.

A second appeal was filed on 5 May 2016, by 20 notaries public from the district of Cagliari, Lanusei and Oristano.

A third appeal against the same decree was filed on 10 May 2016 by the National Union of Notaries.

The last two appeals also requested suspension, however that request was withdrawn by the appellants at the hearing on 16 June. The Court has not yet set a date for the discussion hearing.

In subsequent briefs filed on 19 July 2016, 28 September and 4 October 2016, additional grounds to the three appeals listed above were also raised. They challenged the directorial decree of 1 July 2016, which approved the technical specifications for the effective implementation of the registration process and Circular 3691/C, also of 1 July, which prescribed the operational procedure for registering the documents, for the Business Register offices.

The first additional appeal went to a discussion hearing with regard to the suspension, on 19 July, immediately preceding the date on which the provisions became effective. Section 3A of the district court rejected the interim appeal, thus allowing the provisions to take effect. The same at court order adjourned the ruling in the summary proceedings until 30 August. At the hearing set on that date, the appellant discontinued the summary proceedings, and the Court adjourned the matter until a hearing on 16 February 2016. MISE is now defending the order through the courts.

1.7 EQUITY CROWDFUNDING

In implementation of Article 30 of the Growth 2.0 Decree, in 2013 Italy was the first country in the world to issue its own dedicated equity crowdfunding regulations. Innovative startups are now able to raise equity investments through campaigns published on online portals authorised by Consob – the National Commission for Companies and the Stock Exchange.

Early in 2015, the Investment Compact added weight to these regulations, by introducing three important changes:

1. Innovative SMEs can also organise equity crowdfunding campaigns;
2. Campaigns can now also be made by collective investment undertakings (UCITs), and other joint-stock companies that mainly invest in innovative startups and innovative SMEs: this is a development that enables portfolio diversification and the reduction of risk for retail investors;

3. As a derogation from the ordinary legislation, the transfer of shares in innovative startups and SMEs will be dematerialised, therefore reducing the related costs, with a view to making the secondary market more fluid.

In its decision of 24 February 2016, Consob updated the Regulations to include the above changes, and introduced further simplifications: the appropriateness checks can now be carried out by the managers of the portals, not solely by the banks, so that the entire procedure is now fully online. Two new categories have now been introduced into the world of authorised professional investors: the "professional investors on demand", as defined in the European MiFID[2] directed on the provision of investment services, and "investors supporting innovation", a concept that includes parties such as business angels.

BOX 2. The new-look regulations on equity crowdfunding

With the entry into force of the "Regulation on the raising of risk capital through online portals" approved by Decision 18592 of 26 June 2013, Consob launched a campaign to monitor the impact of this tool. This is mainly based on a system of indicators to assess, ex post, the costs and benefits of the regulation as identified in the impact analysis report published with the Regulation[3].

The empirical evidence gathered on 31 March 2015 as part of the monitoring of regulatory implementation has now yielded the initial response on the performance of the indicators set during the ex-ante impact analysis stage:

i. The relationship between the managers of the portals included on the register, and the "legal" managers (14) has provided initial indications on the proportionality of the costs involved in the authorisation process;

ii. The relationship between the successful bids and the total bids offered on the portals (36% in absolute terms and 49% in terms of counter value), a lack of complaints and objections received by the regulator, and the absence of sanctions or provisional measures taken against the managers are signs that indicate a reliable financial environment. However, this data, compared against the total funds raised (just over €1.3 million as of 31 March 2015) and the results of equity crowdfunding in other Member States, has shown that the absence of problematic situations may be due to the fact that crowdfunding is still a very limited reality, in quantitative terms;

iii. The average value of subscriptions was found to be high, indicating that it is mainly sophisticated investors with a good level of knowledge and experience who are using these platforms;

iv. With regard to the role played by professional investors, based on the data collected, it is not possible to say that their presence is an essential condition in order for the offer to be successful.

In the first quarter of 2015, it became necessary to amend the Regulations due to the major legislative changes introduced by the Investment Compact. This was an opportunity for a broader consideration of the regulatory framework, approximately two years after it came into force, by gathering the opinions of financial operators.

2 The EU Directive 2004/39/EC (MiFID – Markets in Financial Instruments Directive) was issued by the European Parliament on 21 April 2004. The directive meets the need for a level playing field among the financial intermediaries of the European Union without prejudicing investor safety and the freedom of movement of investment services throughout the EC.

3 All the consultation and impact analysis work done in connection with the adoption of the Regulations can be found at: http://www.consob.it/web/investor-education/consultazioni-sul-crowdfunding-2013

BOX 2. The new-look regulations on equity crowdfunding

19 June 2015 saw the publication of a "Preliminary Consultation Document"[4] containing guidelines for a revision of the Regulations, the impact assessment based on the above data and indicators, and a questionnaire addressed to the financial operators so that they can provide evidence of the concrete application of the regulations, with particular reference to the proportionality of the obligations it has imposed. 35 contributions were received in reply. Using the stakeholder mapping technique to classify them, this was considered to be a sufficient range of opinions. The preliminary consultation highlighted that essentially, the operators considered the costs imposed by the Regulations to be proportionate. Those obligations considered to be excessively onerous related to the subscription of part of the offers by professional investors, and the mode of execution of the orders. These issues, together with other factors (not regulatory but cultural in nature) were identified as some of the reasons for the lack of awareness of the instrument and therefore of the benefits in terms of the policy to support innovation, contained in the delegated law.

Based on this assessment, alternative options were defined, with the aim of maintaining the safeguards that have effectively contributed to the creation of a reliable environment. The idea is to reduce the costs for all operators involved, incentivising informed investment and enabling the portals to provide a quality service.

As far as the mode of execution of orders is concerned, the procedure has been simplified and is now fully online. Managers who meet the organisational requirements can now carry out there are indirect checks on the appropriateness of the operation, which were formerly the preserve of the banks. One of the steps of the "informed investment process" (the questionnaire) was also eliminated as it was considered to be a duplication of the appropriateness test.

The reformed Regulations were sent for consultation on 3 December 2015 until 11 January 2016. Further corrections to the regulatory text were approved at the end of that phase. In particular, a new category of "investors supporting innovation" was introduced. These investors can contribute to the success of an offer by subscribing to the prescribed share of 5% of each offer.

In implementation of the new legal provisions, and following the monitoring and evaluation process completed in February 2016, changes were made to the Regulations. They were mainly designed to:

i. extend the subjective scope of the potential offerors;

ii. extend the range of financial instruments that can be offered;

iii. introduce the possibility for operators that meet the organisational requirements to carry out their own opt-in appropriateness tests of investors' knowledge and experience, which were previously the preserve of the banks and securities brokerage firms. This means that banks and investment firms will be exclusively responsible for the execution of the operations (without the need to enter into a written framework agreement);

iv. extend and specify information about the management of the portal and the individual offers to be supplied to the potential investors;

v. eliminate the need to administer a questionnaire proving a full understanding of the type of investment, as this was seen to be a duplication of the appropriateness tests carried out by the operators or banks (if the managers did not carry out the regulatory opt-in);

vi. extend the appropriateness of tests in the event of opt-in to include all investments, also "sub threshold" operations;

vii. strengthen the separation between the assets of the offeror and the funds raised, until closure of the offer;

4 All the analysis and consultation work that led to the regulatory changes adopted in February 2016 can be found at: http://www.consob.it/web/investor-education/consultazioni-sul-crowdfunding-2015

BOX 2. The new-look regulations on equity crowdfunding

viii. extend the scope of parties entitled to subscribe to the share reserved for professional investors and special categories of investor as identified by Consob as "professional clients on demand" defined in the MiFID directive and the new category of "investors supporting innovation";

ix. impose an obligation to start trading, where campaigns are published, within six months from the date of authorisation.

These changes, within the confines dictated by the delegated law, are intended to improve regulations for the benefit of investors thanks to more efficient information, extension of the controls on the provision of the service and a reduction of the costs determined by certain procedural elements that have proved to be excessively onerous. The fulfilment of this objective is crucial if equity crowdfunding is to prove to be a more effective instrument and an alternative source of fundraising for innovative companies, without forgetting the cultural reasons that hamper their growth (Illustrative Report of the decision to amend the Regulations).

As of 31 July 2016, 16 authorised portals had registered on the Consob register, together with one legal operator. 14 of these are active. In 2016, three operators asked to be removed from the register. Of the 16 authorised portals, three exercised the regulatory opt-in and are therefore able to carry out all the innovative startup fundraising operations online. This enables investors to complete the subscription without having to contact the bank or another intermediary to carry out an appropriateness evaluation on the investment.

Although these changes are still being implemented in terms of compliance by the regulated parties, they have shown operators a more flexible regulatory policy. Together with an increasingly well-defined, clearer perception of equity crowdfunding, this has helped to attract a growing number of businesses and investors to the platforms. Please refer to paragraph 4.5 on the measurement of the tool's performance.

1.8 INCENTIVES FOR INVESTMENTS IN INNOVATIVE STARTUPS

With the Decree issued on 25 February 2016, the Ministry for Economic Development extended the tax incentives for individuals and legal entities investing in innovative startups until 2016. In the original version of Article 29 of the Growth 2.0 Decree, they had been limited to the three-year period 2013-2015.

This extension was stipulated, in the primary legislation, in Article 16b of the decree law no. 76 of 28 June 2013, converted with amendments by Law no. 99 of 9 August 2013.

After due notification in accordance with Article 29 of the Growth of 2.0 Decree, the European Commission decision of 14 December 2015 authorised the aid also for 2016.

The structure of the incentive is unchanged. In brief, it covers investments made by individuals – by means of a personal income tax deduction of 19% of the investment up to a maximum investment amount of €500,000 – and legal entities, by means of a deduction from corporate income tax of 20% of the investment up to a maximum investment sum of €1.8 million: these incentives apply both to direct investments in startups and to indirect investments via UCITs and other companies that mainly invest in startups. There is a higher tax benefit (25% income tax deduction; 27% corporation tax deduction) if the investment is made in a social startup or a company that develops and markets innovative products or services with a high technological value in the energy field.

Apart from the need to extend the period of application of the incentive to 2016, the Ministerial Decree was also necessitated by the obligation to adapt the regulations to the new EC guidelines on State aid to promote investments in risk finance (Communication of the Commission 2014/C 19/04).

Firstly, this has enabled an increase in the maximum threshold of incentivised investments that each startup can receive. Previously this was €2.5 million for each tax year and is now 15 million, calculated over five years.

Another important change is the reduction in the grounds for exclusion from the incentive. In the previous version of the Decree (Art. 2(3)(d)), which applied to the three year period 2013-2015, in line with the European guidelines in force at the time, the eligible investments did not include contributions made by parties with a significant influence on the startup, in other words those who already held a stake of more than 30% in terms of voting rights are exercisable at the ordinary meeting, or a share in the capital or assets of the company. Art. 2(3)(d) of the new decree has relaxed this exclusion factor considerably, and refers to the regulations on "further investments) in Regulation (EU) No. 651/2014 of the Commission, of 17 June 2014, Art. 21(6) of which reads: *"The risk finance aid may also cover follow-on investments made in eligible undertakings, including after the 7 year period mentioned in paragraph 5(b), if the following cumulative conditions are fulfilled: a) the total amount of risk finance mentioned in paragraph 9 is not exceeded; b) the possibility of follow-on investments was foreseen in the original business plan; c) the undertaking receiving follow-on investments has not become linked, within the meaning of Article 3(3) of Annex I with another undertaking other than the financial intermediary or the independent private investor providing risk finance under the measure, unless the new entity fulfils the conditions of the SME definition."*

In addition, compared to the previous version, the new Ministerial Decree has excluded the loss of the status of innovative startup in the three following cases: five years having passed since the date of formation; exceeding the value of annual value of production of €5 million; listing on a multilateral trading system.

1.9 SIMPLIFIED, FREE ACCESS TO THE GUARANTEE FUND: EXTENSION TO INNOVATIVE SMES

As already described at length in the previous edition of this Report, the Investment Compact, which was approved and converted into law early in 2015, gave innovative SMEs many of the incentives that had already been provided to innovative startups in the Growth 2.0 Decree at the end of 2012. The main measures include the possibility for innovative SMEs to access the Central Guarantee Fund free of charge, to a simplified procedure, to facilitate access to bank credit. As with the innovative startups, also for SMEs the guarantee would cover up to 80% of the credit supplied by the bank up to a maximum of €2.5 million.

In implementation of this provision, on 23 March 2016, a Decree was issued by MISE jointly with MEF. In the Guide published on 24 May 2016, the DG for Industrial Policy, Competitiveness and SMEs (MISE) published the regulations.

The Decree provided for a substantial extension for innovative SMEs of access to the Fund through the "simplified" procedure which was already contained in Part VI of the Fund Operating Provisions (p. 109).

This procedure allows access to the Guarantee Fund without the operator carrying out a credit rating of the beneficiary company – a rating that is therefore done by the requester, bank or credit consortium.

In general, the simplified procedure can only be accessed for financial transactions that not only meet a series of requirements concerning the amount of the loan compared to sales, sales trends and losses, but are also backed by collateral, bank or insurance guarantees granted to companies in the "Category 1" rating section, based on scoring models used by the Guarantee Fund as shown in Part VI of the Operating Provisions.

In relation to the innovative SMEs' financial operations the Ministerial Decree recognises the importance of accessing the Fund through the simplified procedure even if the SME is in the Category 2 band, as long as the other requirements of the operational provisions are met.

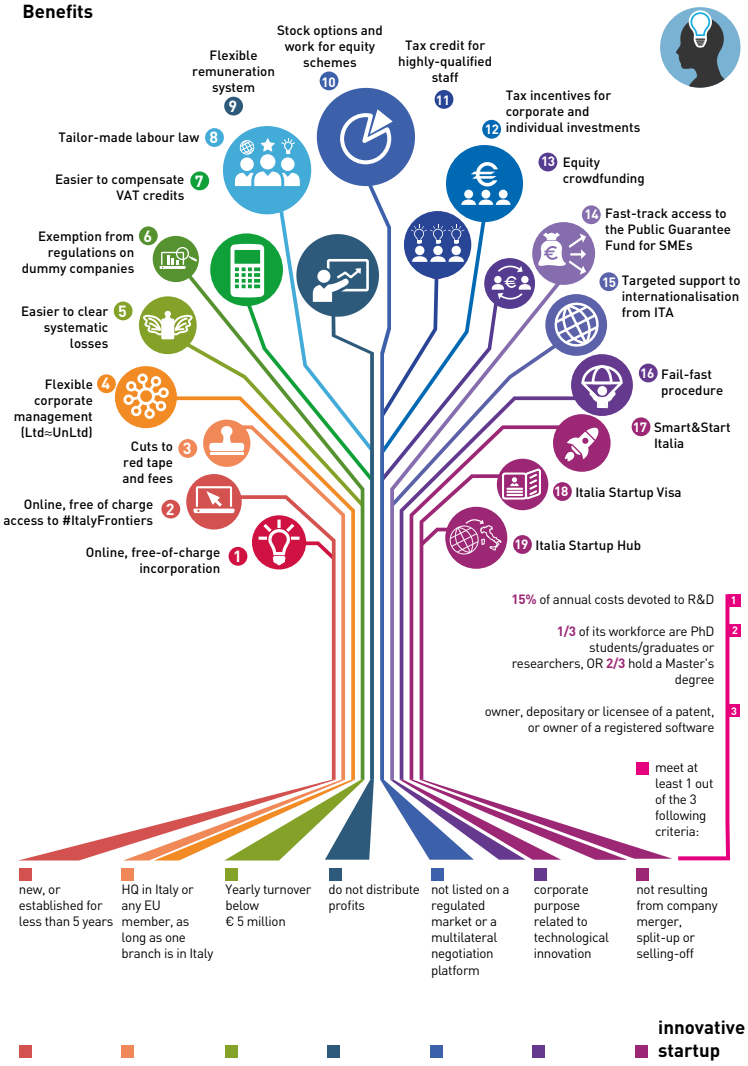
Also, as mentioned, notwithstanding the general provisions, the guarantee on the bank finance supplied to innovative SMEs is granted by the Fund free of charge.

2

INNOVATIVE STARTUPS, INNOVATIVE SMES AND CERTIFIED INCUBATORS: OVERVIEW ON 30 JUNE 2016

This section describes the reality of innovative startups in the fourth year of operation of the special government policy. The detail of this description can be immediately understood by looking at the variety of issues dealt with. These include the dynamics in new registrations and deletions of innovative startups from the special section of the Business Register, their geographical distribution, the configuration of their shareholder bodies, size in terms of workforce and sales, economic performance and so on.

Unless otherwise specified, the data refers to 30 June 2016. Although this is not the last available date at the time the Report was published, it has been taken as a reference to allow an easy comparison with the data recorded in the previous editions. In certain sections of this chapter, specifically those dedicated to financial performance, as stated in the text the decision was taken to postpone the findings until 30 September as it would only have been possible to observe the balance sheet figures updated to the previous year, on that date.



2.1 INNOVATIVE STARTUPS

Before reading the next few pages, the reader is invited to look at the dashboard below, which gives a general overview of the main statistical trends on the reference population.

Table 2.1.a: Annual trend in key indicators on the innovative startups registered in the special section of the Register, 2014-2016[5]

INDICATORS	30/09/2014	30/09/2015	30/09/2016
No. of startups	2.630	4.704	6.363
% of total joint-stock companies	0,18	0,31	0,38
No. of employees	2.607	5.351	9.042[6]
No. of shareholders	10.646	18.677	25.622
Average value of production	131.451	131.127	151.884,72
Total value of production	183.768.452	349.192.469	585.211.807
% fixed assets/ assets	30,61	30,83	29,44
% profit-making startups/total	42,56	42,66	42,93
Added value of profit-making startups	0,33 €	0,33 €	0,32 €

Source: InfoCamere

2.1.1 Trend of new subscriptions

On 30 June 2016, there were 5,942 companies listed in the special section of the Business Register. Of these, 5,216 were incorporated after the entry into force of Decree Law 179/2012 (20 October 2012). 1,127 innovative startups (19% of the total), entered the special section in the first six months of 2016, 2,246 (38%) in 2015, 1528 (26%) in 2014, and 1,041 (17%) before 2014. Compared to the numbers recorded in the last edition of the annual report (30 June 2015) the number of innovative startups listed in the special section has risen by 1693. This is an increase of 39.8% on the previous year and as much as 160% compared to 30 June 2014.

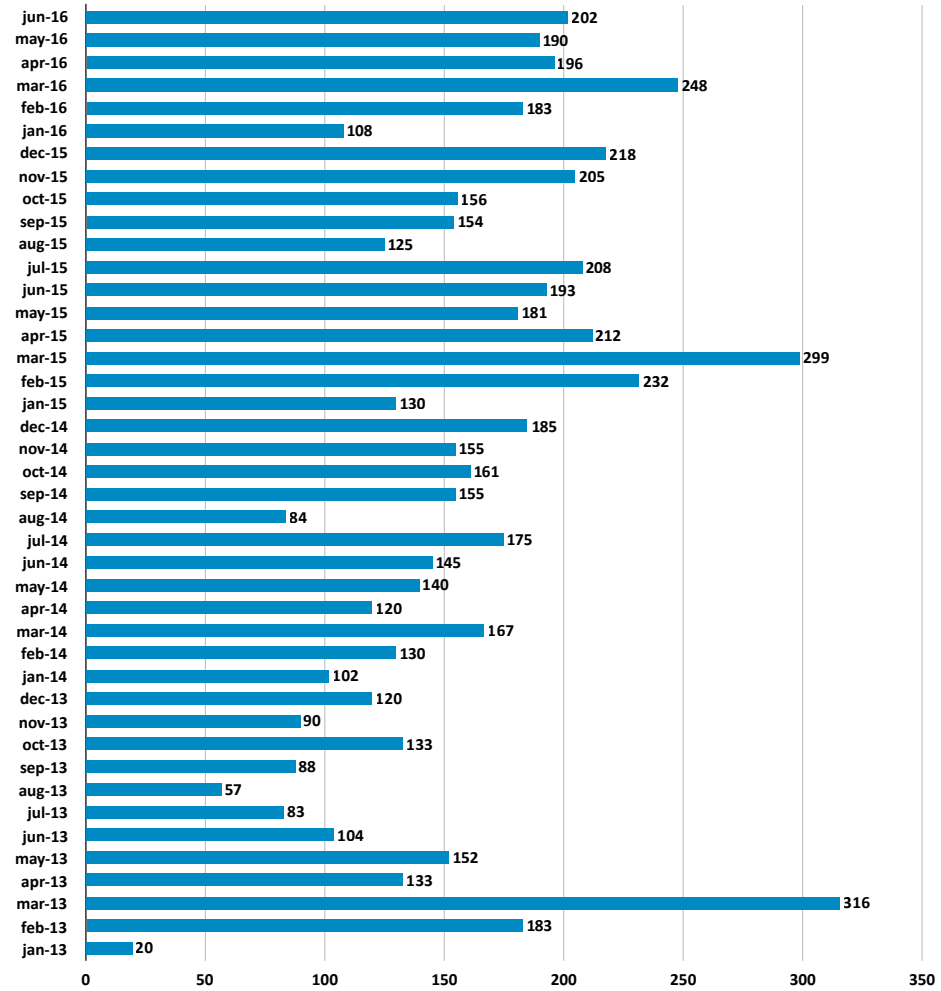
5 Financial data calculated on the financial statements filed in the previous year.

6 Figure recorded on 30 June 2016.

2 INNOVATIVE STARTUPS, INNOVATIVE SMES AND CERTIFIED INCUBATORS: OVERVIEW ON 30 JUNE 2016

The number of innovative businesses listed in the special section is continuing to grow steadily. Since the Italian Startup Act came into force, the average number of monthly in registrations has risen from 123 in 2013 to 143 in 2014 and 193 in 2015. This pace was maintained in the first half of 2016 with an average of 187.8 new innovative startups registered per month. Leaving aside the peak that coincided with the first few months of the policy being in force, March 2015 immediately after the launch (16 February) of the Smart&Start Italia measure (see para. 4.8) saw the highest number of registrations in one month, with 299 new innovative startups (figure 2.1); the highest figure recorded in the Report period saw 248 new registrations in March 2016.

Figure 2.1 1: Monthly registration trends for innovative startups (January 2013 – June 2016)

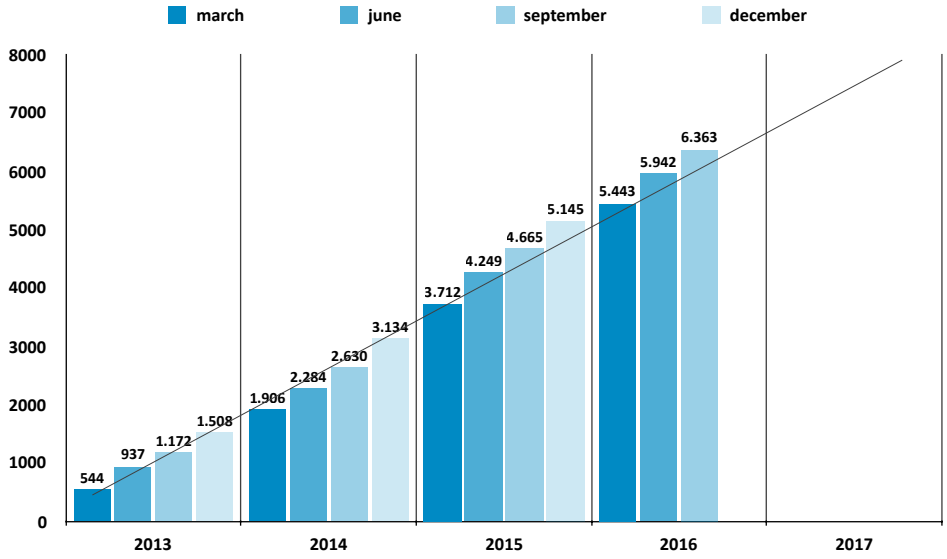


Source: Based on InfoCamere data

Looking at the stock of registered companies, it can be seen that the pace of registrations picked up in the first half of 2016.

Continuing at this speed, the number of innovative Italian startups could exceed 7000, by the middle of 2017. However, this projection does not take into account the significant number of companies (840) that were not yet listed in the special section on 30 June 2016 but, having been incorporated prior to 18 December 2012, will reach the maximum five year period on 18 December 2016. After that date, they can either apply to be converted into an innovative SME or alternatively they will be deleted from the special section. Whether they are converted into innovative SMEs or deleted from the special section, there will be a considerable reduction in the size of the section.

Figure 2.1 2: Total number of innovative startups at the end of each quarter (March 2013 – September 2016)

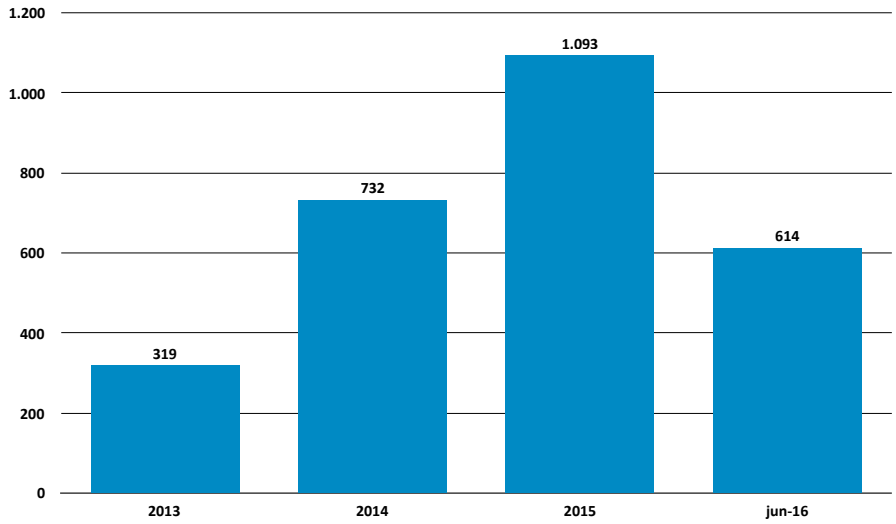


Source: Based on InfoCamere data

2758 innovative startups registered simultaneously in the ordinary and special sections, in other words they were recognised as startups at the time of their formation (46.4% of the total). Looking at the trend, it can be seen from Figure 2.1.3 that the number of businesses classified as innovative startups from the time of incorporation is rising significantly. Companies that are not classified as innovative startups from formation are evenly distributed over the intervals mentioned in Table 2.b.

The average gap between the time of formation and registration in the special section for all those startups with valid figures (therefore excluding the 90 registered with missing or irregular figures) is 198.16 days (6.5 months).

Figure 2.1 3: The annual trend in Business Register in the special section for innovative startups, from the time of formation



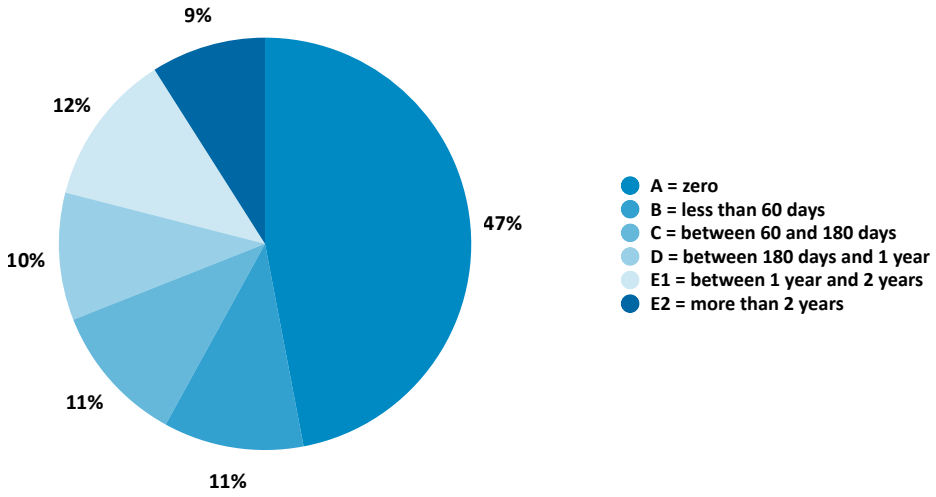
Source: Based on InfoCamere data

Table 2.1.b: Distribution of innovative startups by time between registration on the Business Register and registration in the special section

Time between formation and registration in the special section	no.	percentage
0	2.758	46,42%
1-60 days	642	10,80%
61-180 days	643	10,82%
181 days - 1 year	573	9,64%
Between 1 year and 2 years	702	11,81%
More than 2 years	534	8,99%
data not valid	90	1,51%
Total	5.942	100,00%

Source: InfoCamere

Figure 2.1 4: Distribution of innovative startups by time between registration on the Business Register and registration in the special section[7]



Source: Based on InfoCamere data

2.1.2 Startups – Demographic trends; new incorporations and cessations

2015

A statistical analysis of the demographic profile of the population of businesses at any given moment, and the way in which these businesses develop over time, is known as "business demographic".

Once again, the population of innovative startups increased appreciably in 2015. The positive balance between the new entries and companies leaving the special section is 2,018 (higher than the 1,643 of 2014), while the rate of growth in registrations is 64.5% compared to 2014: the number at the end of 2015 was 5,146 compared to 3,128 at the end of 2014.

In 2015 there were 2,285 new registrations in the special section, higher than that of the previous year (1,699). Of the new entries, 1,592 (approximately 70%) were incorporated in 2015.

There were 267 deletions from the special section of the register, of which 103 (38.6%) were due to the cessation of trading. The departure of the other companies can depend on two factors: failure to confirm compliance with the criteria each year, the reporting obligation under Article 25(15) of Decree Law 179/2012; or more likely, the loss of one or more of the innovative startup requirements contained in Article 25(2) of Decree 179/2012. The figures available to us allow us to analyse part of this second scenario: for example it is known

7 The values in the graphs refer to the entire population of innovative startups with valid figures. This excludes the 90 startups registered with missing or irregular figures.

that 77 companies, previously incorporated with the launch of the Growth of 2.0 Decree in other words subject to the transitional rules in Article 25(3) of that category were deleted from the special section due to having exceeded the time limit. In particular, the transitional rules provided for an extended duration, until 18 December 2014, for companies incorporated between 20 October 2008 and 19 October 2009.

Of the 3128 businesses that were registered at the end of 2014, 2,861 confirm their registration also at the end of 2015. 55.6% of innovative startups registered at the end of 2015 were listed in the special section also in the previous year; the remaining 44.4% had not yet been incorporated at the end of 2014 (1592 companies) or had not yet provided a self-certification.

In 2015, all areas of the country showed a positive balance compared to 2014: the largest increase in absolute terms was the North-West (+605), followed by the South (+494). As in 2014, the highest growth rate for startups was recorded in the Southern regions (+73.1%). The rate was slightly above average in Central Italy (+65.3%). The figures for the two regions of the North (61.9% for the North West and 59.8% of the North East) are below the average national value of 64.5%. However, at the end of 2014 both of these areas already had a significant presence of startups (978 in the North West and 796 in the north-east).

Among the economic sectors, the biggest differences in absolute terms were in the services sector (+1,499), followed at a considerable distance by industry (+375 units). The growth rate of innovative startups is higher than average in those sectors with fewer registered businesses. One example is the “Other sectors” category, which includes agriculture and tourism in which there has been an increase of 140.9%, although this amounts to just 53 companies in absolute terms. The commercial sector is similar, with a 100% increase even though there are only 226 companies in this sector, listed on the special section.

The formation rate, which is the ratio between the number of new companies established in 2015 and the number of companies recorded at the start of the year is still very high, although it has reduced significantly, from 79.9% in 2014 to 50.9% in 2015. The slowdown in the formation of startups in 2015 affected every area of the country, particularly the South and all sectors of the economy particularly those with a lower number of startups such as “Other sectors”.

The startup closure rate, which is the ratio between the number of companies that ceased trading at the end of the year and the total number of existing businesses recorded at the start of the year, has increased from 1.7% in 2014 to 3.3% in 2015. Apart from the north-east, this phenomenon affected every region of the country and every sector of the economy, except Commerce (where there are only 226 startups, however).

Measured in terms of turnover, i.e. the difference between the formation rate and the closure rate, the demographic trend is, as in 2014, very positive: +47.6% overall. Every area and sector of the economy recorded a positive result.

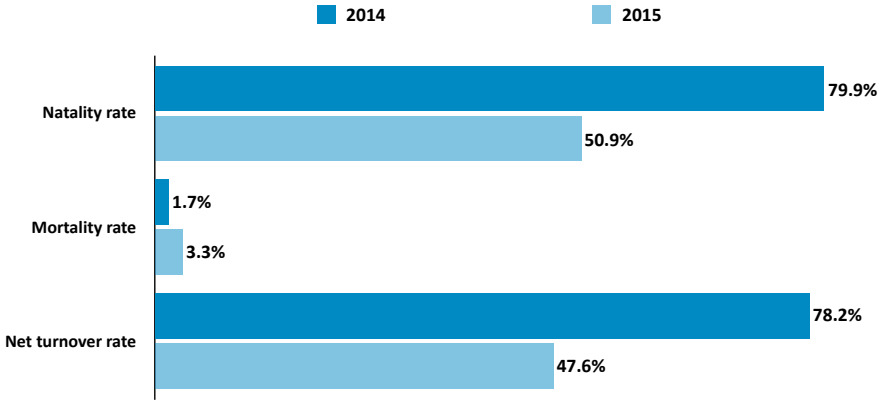
Table 2.1.c: Formations and closures of innovative startups – 2015

	TOTAL	NORTH-WEST	NORTH-EAST	CENTRE	SOUTH	INDUSTRY	SERVICES	TRADE	OTHER SECTORS
NUMBER OF STARTUPS AT THE END OF 2014	**3.128**	**978**	**796**	**678**	**676**	**584**	**2.409**	**113**	**22**
Registered	**2.285**	**670**	**565**	**512**	**538**	**425**	**1.705**	**124**	**31**
established in 2015	*1.592*	*466*	*399*	*370*	*357*	*287*	*1.217*	*68*	*20*
established earlier	*693*	*204*	*166*	*142*	*181*	*138*	*488*	*56*	*11*
Deleted from the special section	**267**	**65**	**89**	**69**	**44**	**50**	**206**	**11**	**0**
Ceased trading	*103*	*33*	*28*	*23*	*19*	*13*	*88*	*2*	*0*
Did not meet criteria; Other	*164*	*32*	*61*	*46*	*25*	*37*	*118*	*9*	*0*
NUMBER OF STARTUPS AT THE END OF 2015	**5.146**	**1.583**	**1.272**	**1.121**	**1.170**	**959**	**3.908**	**226**	**53**
Balance	**2.018**	**605**	**476**	**443**	**494**	**375**	**1.499**	**113**	**31**
Growth rate (*)	**64,5%**	**61,9%**	**59,8%**	**65,3%**	**73,1%**	**64,2%**	**62,2%**	**100,0%**	**140,9%**
Confirmed	*2.861*	*913*	*707*	*609*	*632*	*534*	*2.203*	*102*	*22*

(*) The growth rate is the ratio between the difference between formations and closures recorded in the period and the number of startups on the register at the beginning of the period.

Source: InfoCamere

Figure 2.1 5: Formation, closure and turnover rates of innovative startups



Source: Based on InfoCamere data

2016

In the first six months of 2016, the positive difference between new entries and exits from the special section was 796 units, representing a growth rate in the number of registered companies of 15.5%.

There were 1,127 new registrations in the special section during the first half of 2016. Of these, 763 (67.7%) were companies formed between January and June 2016.

There were 331 deregistrations from the special section of the register, of which 57 (17.2%) were due to the cessation of trading. The other companies lost the requirements for innovative startups, as identified in the Decree Law 179/2012, or failed to confirm their registration on this list. Also in this respect, we can describe a significant part of the phenomenon, highlighting that 162 companies, which were incorporated prior to the launch of the Growth 2.0 Decree, in other words subject to the transitional rules in Article 25(3) were deregistered from the special section due to having exceeded the time limit. In particular, the transitional rules provided for an extended duration, until 18 December 2015, for companies incorporated between 20 October 2009 and 19 October 2010. The businesses were automatically deregistered by the Chamber of Commerce during the first part of the following year. However, we know that between 2015 and 2016, no fewer than 235 (77 deregistered after 18 December 2014 plus 163 deleted after 18 December 2015) innovative startups left the special section due to no longer meeting the time requirement. The figures available to us do not give as a systematic, complete picture of the criteria that were not met by the companies that did not leave the special section either as a result of ceasing trading or due to having exceeded the time limit (87 in 2015 and 112 in 2016), although some of them may have knowingly or unknowingly lost their status due to not having submitted the annual confirmation of compliance with the requirements. At any rate, the analysis is supported by the fact that 49 businesses already registered in the special section are now included in the

section reserved for innovative SMEs. For more information about this aspect, see par. 2.3.2.

As mentioned above, the number of innovative startups on 30 June 2016 was 5942, compared to 5146 on 31 December 2015. Of these, 4815 confirmed their registration (93.6%).

Every area of the country recorded a positive balance between the new entries and companies leading the section compared to the end of 2015: the largest balance in absolute terms was in the north-east (+218) followed by the North West (+202). The highest growth rate for startups was seen in the north-eastern regions (17.1%), which was slightly above that of the South of Italy (16.6%). The result was also above average in Central Italy (16.2%). The figure for the North West (12.8%) is lower than the national average.

The sectors that, more than others, contributed to the growth of the number of startups concerned services. As in 2015, the sectors recording a more rapid rate of growth are those with fewer startups: the “Other sectors” (+ 45.3% with an increase in absolute terms of 24 businesses) and Commerce (26.5%, with an increase of 60 units).

Table 2.1.d: Innovative startups - Formations and Closures – First half of 2016

	TOTAL	NORTH-WEST	NORTH-EAST	CENTRE	SOUTH	INDUSTRY	SERVICES	TRADE	OTHER SECTORS
NUMBER OF STARTUPS AT THE END OF 2015	**5.146**	**1.583**	**1.272**	**1.121**	**1.170**	**959**	**3.908**	**226**	**53**
Registered	**1.127**	**342**	**295**	**246**	**244**	**210**	**814**	**75**	**28**
established in 2016	*763*	*227*	*207*	*170*	*159*	*139*	*568*	*42*	*14*
established earlier	*364*	*115*	*88*	*76*	*85*	*71*	*246*	*33*	*14*
Deleted from the special section	**331**	**140**	**77**	**64**	**50**	**71**	**241**	**15**	**4**
Ceased trading	*57*	*16*	*17*	*13*	*11*	*5*	*49*	*3*	*0*
Did not meet criteria	*274*	*124*	*60*	*51*	*39*	*66*	*192*	*12*	*4*
NUMBER OF STARTUPS AT 30 June 2016	**5.492**	**1.785**	**1.490**	**1.303**	**1.364**	**1.098**	**4.481**	**286**	**77**
Balance	**796**	**202**	**218**	**182**	**194**	**139**	**573**	**60**	**24**
Growth rate (*)	**15,5%**	**12,8%**	**17,1%**	**16,2%**	**16,6%**	**14,5%**	**14,7%**	**26,5%**	**45,3%**
Confirmed	*4.815*	*1.443*	*1.195*	*1.057*	*1.120*	*888*	*3.367*	*211*	*49*

(*) The growth rate is the ratio between the difference between formations and closures recorded in the period and the number of startups on the register at the beginning of the period considered.

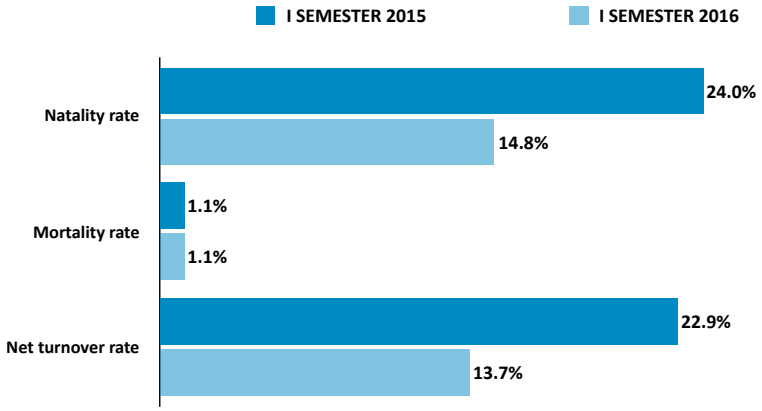
Source: InfoCamere

The formation rate (new businesses/existing businesses) has fallen sharply from 24% to 14.8%. The slowdown in the formation of startups in the first half of the year affected every area of the country, particularly the South, and every sector of the economy, particularly "Other sectors" and Commerce. This slowdown is likely to have been caused by the positive impact on the formation rate seen in the first half of 2015, of the Smart&Start Italia procedure launched on 16 February 2015.

The startup closure rate (companies ceasing trading/existing companies) is stable at 1.1%. There is a slight increase in the North, in industry and in Commerce.

With regard to demographic trends measured in terms of turnover (the difference between the formation rate and the closure rate) as in the first half of 2015 the balance was positive in every area and sector (+13.7% overall).

Figure 2.1 6: Formation, closure and turnover rates of innovative startups



Source: Based on InfoCamere data

The survival of innovative startups

In 2015 the survival rate of innovative startups one year after formation is stable compared to the previous year (98% compared to 97.9% in 2014). This value is extremely high if compared against the survival rate of all Italian businesses, which according to Istat was 76.8% in 2014.

The rate of survival of innovative startups after two years has fallen (from 98% to 94.9%). The three-year survival rate is also declining, although it is still above 95% (from 98.3% in 2014 to 95.1%).

The survival rates show a very slow decline over the years. Of the new innovative businesses incorporated in 2011, 95.9% were still trading four years after formation, while of those created in 2013, 94.9% had survived two years after formation.

Table 2.1.e: The survival of innovative startups

Year established	Year of survival			
	2012	2013	2014	2015
2011	100,0	100,0	98,3	95,9
2012		99,8	98,0	95,1
2013			97,9	94,9
2014				98,0

Source: Based on InfoCamere data

The number of startups that have ceased trading is very low: just 160 in the last 18 months (5% of the businesses listed in the special section at the start of the period), 208 from January 2014 until the end of June 2016.

The limited number of innovative startups that have closed can be attributed to the interplay of the following factors:

- In mid-2016 a number of companies were in liquidation or bankruptcy (102): it is likely that some of them will declare that they have ceased trading in the near future;
- Many companies may not yet be at the stage where they can market their product or service. It is legitimate to assume that the market access times will be lengthier for innovative businesses compared to those based on an offer of traditional products or services. Many of them may not have received initial feedback from the market and may still be at a stage of research, prototyping or production. Moreover, as illustrated in paragraph 2.1.10, a not insignificant number of innovative startups have not yet filed any financial statements (2089 out of 5942). Among those that are already in possession of the first financial statements, the number of companies whose value of production is equal to 0 is very high (728) just as the number of businesses with a value of production of less than €1,000 (962);
- The incentive measures in the policy for innovative startups, including an exemption from Chamber of Commerce costs, extension of the period allowed for the reinstatement of share capital in the event of a loss, tax breaks for vehicle companies or those operating at a loss may have favoured the survival of some businesses, even those without turnover. This effect would be fully consistent with the purposes of the policy which is designed to foster the creation and development of new, innovative high-tech businesses;
- Compared to English-speaking countries, for which the failure rates of startups appear much more relevant in statistics, the entry barriers both in regulatory terms (startup costs, at least until the launch of the new online formation procedure) and cultural factors (the perception of failure) may be much higher.

2.1.3 Territorial distribution

As of 30 June 2016, the South is home to 22.9% of the innovative startups in the country, the Central regions have 21.9% and the North has 55.2% (30.1% North-West, 25.1% North-East).

Table 2.1.f: Distribution of innovative startups by region and year of registration

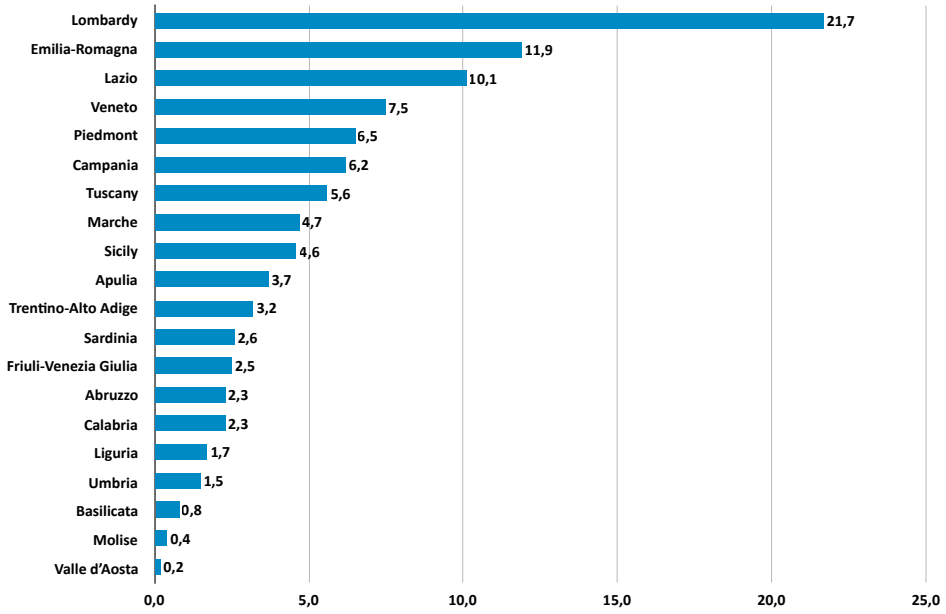
	2012-2013		2014		2015		2016		TOTAL	
North-West	317	30,5%	469	30,5%	658	29,3%	342	30,3%	1.786	30,1%
North-East	270	25,9%	371	25,9%	554	24,7%	295	26,2%	1.490	25,1%
Centre	252	24,2%	302	24,2%	503	22,4%	246	21,8%	1.303	21,9%
South	202	19,4%	386	19,4%	531	23,6%	244	21,7%	1.363	22,9%
Grand total	1.041	100%	1.528	100%	2.246	100%	1.127	100%	5.942	100%

Source: InfoCamere

The regional distribution of innovative startup registrations, which between 2014 and 2015 had gradually intensified in the Central and Southern regions, showed growth in the northern parts of the country during 2016.

The Italian region with the highest percentage of innovative startups is Lombardy (21.7%), which is also where the biggest number of companies currently trading are located (15.8% of the total). This is followed by the Emilia-Romagna region, with 11.9% of innovative startups (7.9% of the total joint stock companies), Lazio, with 10.1% of startups (9.3%) and Veneto with 7.5% (8.5%). Although, until now, there have been fewer innovative startups in the Southern regions compared to the other parts of the country, looking at the trends in Chamber of Commerce registrations it can be seen that registration has gradually intensified in the South as well, with a discreet presence mainly in Campania (6.2%), Sicily (4.6%) and in Puglia (3.7%) (Figure 2.1.7).

Figure 2.1 7: Ranking of Italian regions by percentage of the total number of innovative startups

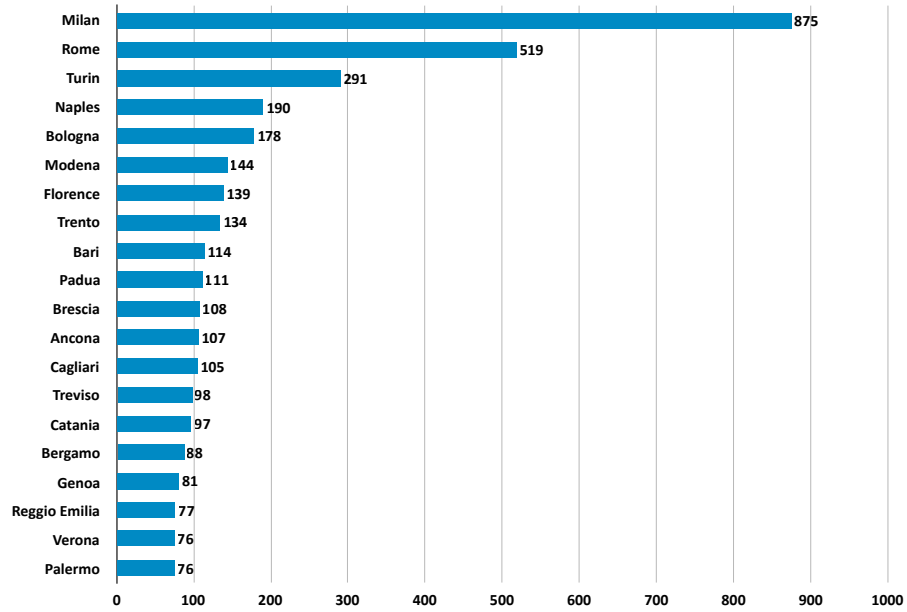


Source: Based on InfoCamere data

The largest startups in terms of workforce are mainly found in the North (22 in the category of 20-49 staff, three in the category of 50-249); seven of them are located in the southern regions and five in Central Italy.

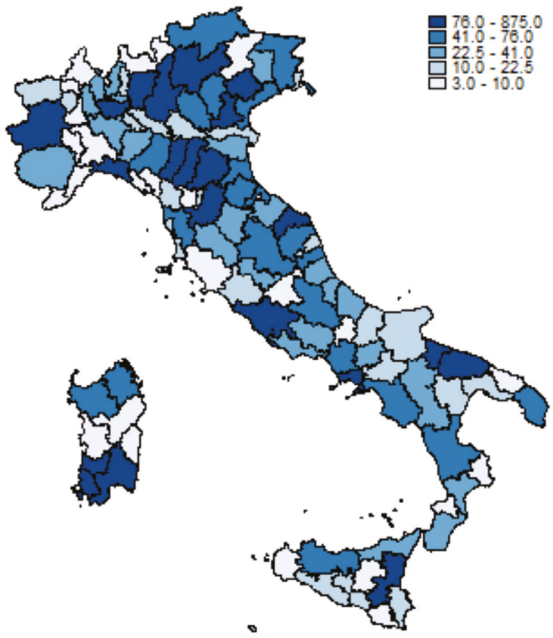
A detailed look at the distribution of innovative startups by province shows that Milan is the area with the highest number: 875 businesses, representing 14.7% of the total. Rome is next with 519 (8.7%), Turin 291 (4.9%), Naples 190 (3.2%) and Bologna 178 (3.0%). 13 provinces are now consistently above the 100 mark.

Figure 2.1 8: Ranking of the top twenty Italian provinces by number of innovative startups



Source: Based on InfoCamere data

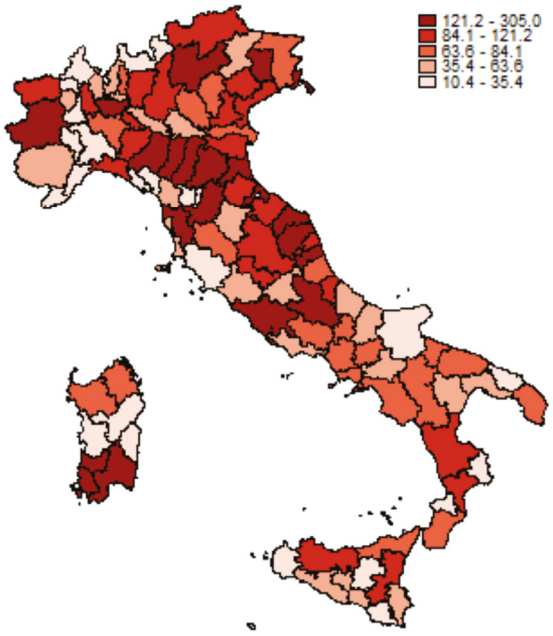
Figure 2.1 9: The number of innovative startups in each Italian province[8]



Source: Based on InfoCamere data

8 Note: this, and the following regional distributions do not take into account the following provinces: Barletta-Andria-Trani, Carbonia-Iglesias, Medio Campidano, Ogliastra, Olbia-Tempio.

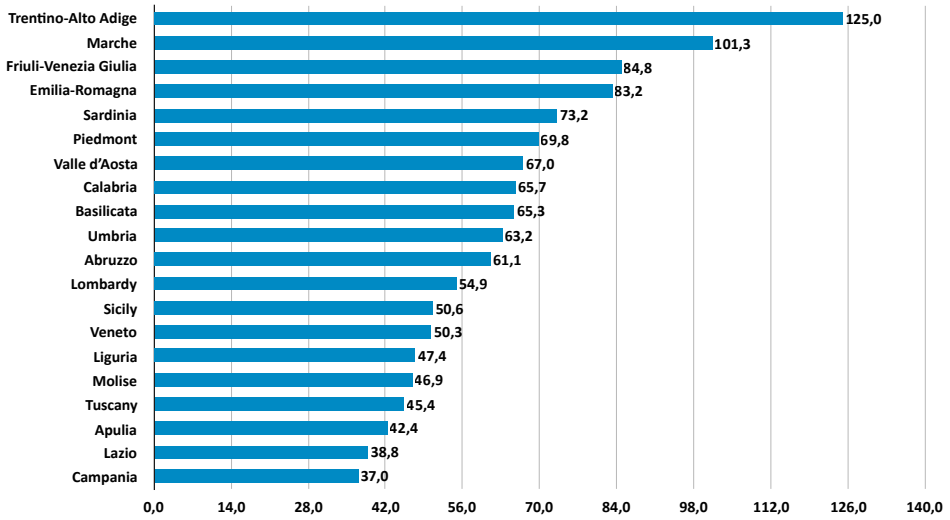
Figure 2.1.10: Innovative startups per thousand currently trading companies (Italy index = 100)



Source: Based on InfoCamere data

The ratio of innovative startups to the total number of joint-stock companies shows a very diversified situation: at regional level the average figure, which is 55.5 startups every 10,000 joint-stock companies nationally, is higher in the north-east (72.2), slightly above the national average in the North West (57.1); lower in the Centre and South, where the ratio is 48.3 startups for every 10,000 companies. Compared to the regional ranking, Trentino-Alto Adige is the region with the highest ratio of startups relative to joint-stock companies, with 125 startups per ten thousand companies. Next is Marche, with 101.3, with Friuli-Venezia Giulia some way behind (84.8) and then Emilia-Romagna (83.2). The top region in the South of Italy is Sardinia with 73.2 startups for every 10,000 companies. Lombardy is in 12th position, with a ratio of 54.9, while Lazio and Campania are in the last two places, at 38.8 and 37.0 respectively (Figure 2.1.11).

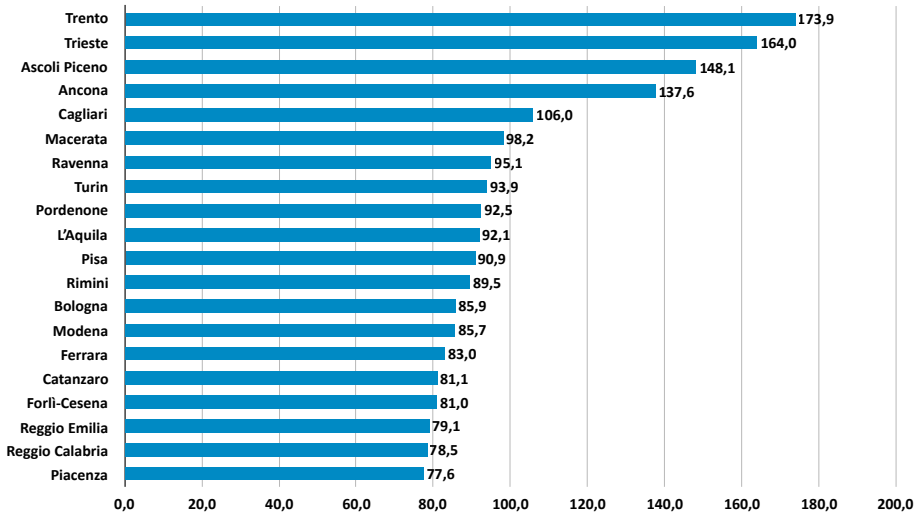
Figure 2.1.11: Ranking of Italian regions relative to the number of innovative startups per ten thousand joint-stock companies



Source: Based on InfoCamere data

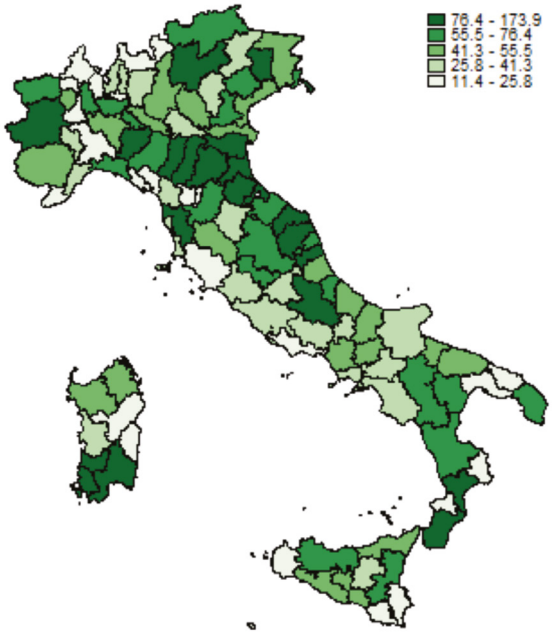
A highlight at provincial level is Trento, with 173.9 startups for every 10,000 joint-stock companies. It is followed by Trieste with 164, Ascoli with 148.1, Ancona 137.6; in fifth position, and the first in the South of Italy, is Cagliari with 106. Milan and Rome are not among the top 20 provinces: Milan is in 22nd position with 74.9 while the capital city is in 64th place at 40.3 (Figure 2.12).

Figure 2.1.12 Ranking of the top twenty provinces for innovative startups per ten thousand joint-stock companies



Source: Based on InfoCamere data

Figure 2.1.13: Ranking of Italian provinces relative to the number of innovative startups per ten thousand joint-stock companies



Source: Based on InfoCamere data

2.1.4 Legal form

The most common legal form among the innovative startups is the "srl" (limited liability company): almost 80% of businesses are set up in this form. A further 16.9% have chosen the simplified srl, including those with sole shareholder and limited capital, 2.1% have chosen the cooperative format, and finally 1.1% is incorporated in the form of a public limited company (SpA) (Table 2.1g).

Table 2.1.g: Innovative startups by legal form

LEGAL FORM	NUMER	%
Limited liability company (srl)	4,739	79.8%
Simplified limited liability company	882	14.8%
Cooperative	122	2.1%
Limited liability company with sole shareholder	115	1.9%
Public limited company (SpA)	63	1.1%
Limited liability company with reduced capital	12	0.2%
Limited liability consortium company	5	0.1%

LEGAL FORM	NUMER	%
Company incorporated under the laws of another country[9]	3	0.1%
European company	1	0.0%
Total	5,942	100.0%

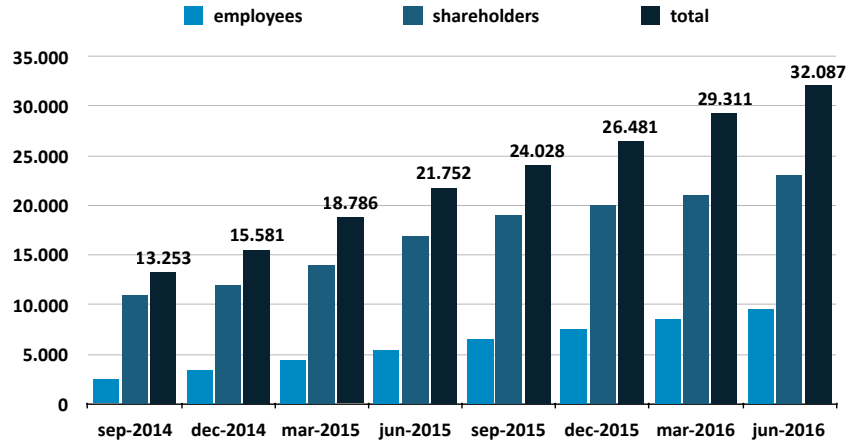
Source: Based on InfoCamere data

2.1.5 Workforce: shareholders and employees

In terms of employment, the 2356 businesses with staff employed 9,042 people at the end of June 2016: an average of 3.5 employees per company. The term "employees" refers to anyone with a contract of employment with the company including part-time and seasonal staff (this figure does not include freelancers working on their own tax codes): compared to 30 June 2015, when there were 4,891 companies, the increase is 85%. The median number of workers is 2: therefore at least half of the startups with staff employ a maximum of two people.

At the end of the current year, there were 23,045 shareholders in the 5801 innovative startups, for whom the Business Register indicated at least one shareholder[10]. The increase compared to June last year is more than 6000 companies, representing 36.7% (Figure 2.14). On average, every startup has 4 shareholders; half of them have no more than 3. These figures are higher overall than those of joint-stock companies (average: 2.6; median: 2).

Figure 2.1.14: The contribution of innovative startups to employment



Source: Based on InfoCamere data

9 The amendment introduced by category Law 3/2015 allowed the regulations on innovative startups to be applied to companies resident in one of the EU Member States or in members of the European Economic Area agreement, provided that they have a production base or branch in Italy, and also meet the other requirements provided for in Article 25(2) of Decree Law 179/2012.

10 This figure is not available for cooperatives.

Overall, innovative startups employ 32,087 people – including shareholders and non-shareholding employees – assuming that all shareholders play a direct part in the business activity. Compared to 30 June 2015, there were 10,335 more people with direct involvement in the new innovative business: an increase of 47.5%.

The figures contained in the special section of the Business Register allow a detailed analysis of the structure of the shareholder bodies, and in particular the profiles of the shareholders in terms of gender and age.

13.7% of all innovative startups mainly have women in their shareholder body, compared to 16.8% considering female-owned companies out of the total joint-stock companies. 2,634 innovative startups have at least one woman in the shareholder body, representing 44.3% of the total. This percentage is lower than for the percentage of joint-stock companies with a female presence (49.8%).

Startups mainly owned by the under-35s represented 22.3% of the total, a figure that is three times higher than that for joint-stock companies owned by young entrepreneurs (6.7%). 2,290 innovative startups have at least one under-35 in the shareholder body, representing 38.5% of the total, compared to a ratio of 13.2% for joint-stock companies owned by a young entrepreneur.

Startups with a mainly foreign-held shareholder base represent 2.5% of the total, which is lower than the figure for foreign-owned joint-stock companies (4.2%). 746 innovative startups have at least one foreigner among the shareholders, 12.6% of the total, and the percentage is higher than that of joint-stock companies with a foreign presence (10.5%).

By comparison, it is interesting to note the findings from the European Startup Monitor 2015, produced by the German Startup Association in collaboration with Duisburg University and published in March 2016. The publication describes the gender, age and origins of the founding members of startups in the main European countries.

The study shows that most founders are male, in every country, with the average participation of women in Europe being 14.6%, however this imbalance is lower in Sweden (where 33.3% of startuppers are female), in Romania (28.1%) and in France (26.7%). Italy is further behind (13.5%), ahead only of Germany (12.9%).

According to the above study, the average age of European startuppers is 34.6: Italy is in third place in terms of the ratio between founders in the under 24 category (12.9%, behind Belgium and the UK). Looking at the under-35 category, Italy is just above the European average (49.5% compared to 48.2%).

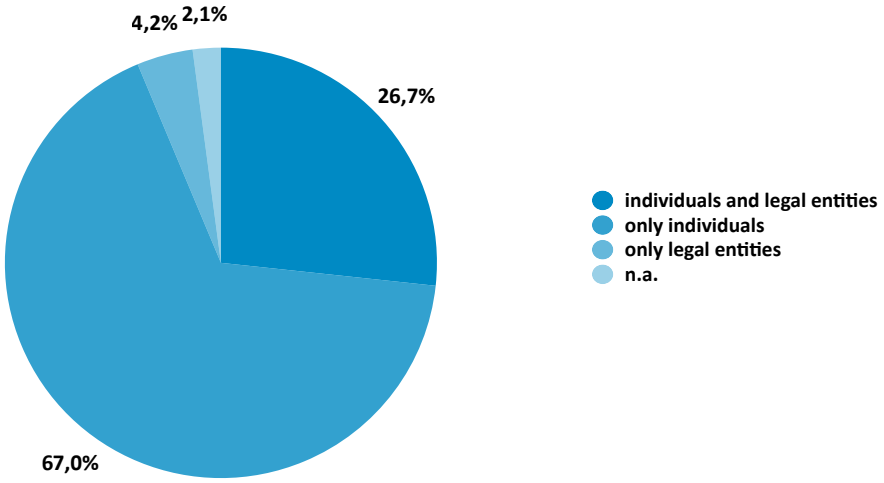
Finally, the study shows that the average ratio of founders who are not citizens of the same country in which the startup is based is 11.8% (7.6% are citizens of other EU countries, while 4.2% are nationals of non-EU countries). In this context, Italian startups have the lowest ratio (1.6% and 0.5%) compared to the figures recorded in other European countries.

2.1.6 Participation of legal entities in startups

This paragraph presents a framework of the participation of legal entities in the shareholder bodies of innovative startups in Italy. The reference population is all of the 6503 businesses listed in the special section of the Register as of 31 October 2016.

There were 4355 innovative startups owned solely by individuals, which represents two-thirds of the reference population. 1,735 are startups with a "hybrid" shareholder body, while 276 are owned exclusively by legal entities[11].

Figure 2.1.15: Distribution of innovative startups by type of shareholder



Source: Based on InfoCamere data

The table below shows that it is more common for innovative startups to have corporate investors in the north-west of the country, where 5% of these businesses have a shareholder body made up entirely of legal entities, with 31% having a hybrid shareholder structure. The percentages are lower in the other parts of the country, down to almost half in the South, where around three-quarters of startups have shareholder bodies made up only of individuals.

11 No details of shareholder structure were available for 137 innovative startups.

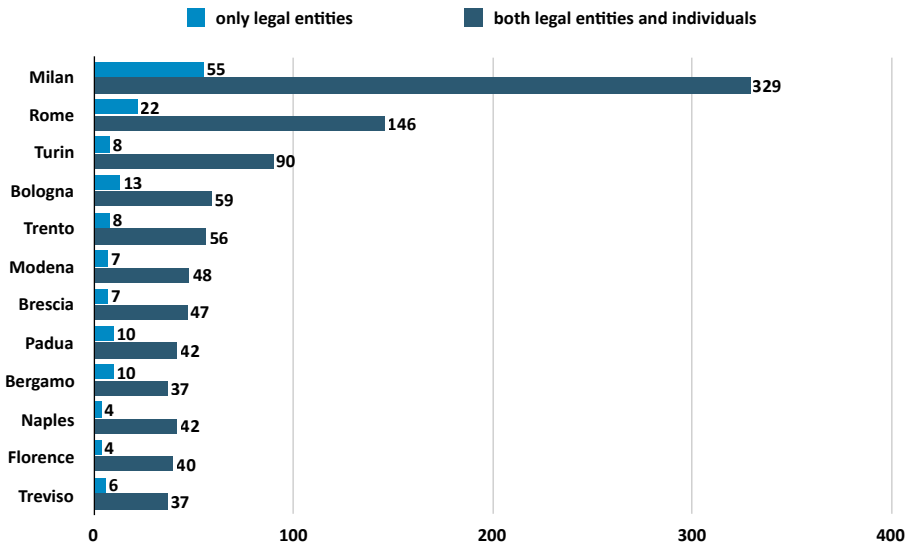
Table 2.1.h: Distribution of innovative startups by type of shareholder and regional distribution

	NORTH-WEST		NORTH-EAST		CENTRE		SOUTH		TOTAL	
Shareholders only individuals	1.222	62,6%	1.088	65,7%	944	67,2%	1.101	73,9%	**4.355**	**67,0%**
Shareholders only legal entities	98	5,0%	82	4,9%	60	4,3%	36	2,4%	**276**	**4,2%**
Shareholders are individuals and legal entities	606	31,0%	464	28,0%	359	25,6%	306	20,6%	**1735**	**26,7%**
not defined	27	1,4%	23	1,4%	41	2,9%	46	3,1%	**137**	**2,1%**
Total	**1.953**	**100%**	**1.657**	**100%**	**1.404**	**100%**	**1.489**	**100%**	**6.503**	**100%**

Source: InfoCamere

The provinces in which innovative startups owned by legal entities are most common are Milan (329 hybrid; 55 legal entities only), Rome (146; 22) and Turin (90; 8).

Figure 2.1.16: Provincial distribution of innovative startups by type of shareholder



Source: Based on InfoCamere data

With regard to the distribution of startups within each class of capital, the innovative startups owned exclusively by individuals have higher percentages among companies with a capital of less than €10,000. This proportion decreases significantly as the amount of capital increases; on the contrary, the percentage of startups owned by at least one legal entity rises steadily with the size of the share capital, reaching the highest figures in the higher classes.

Table 2.1.i: Distribution of innovative startups by type of shareholder and class of share capital

	UP TO 10,000 EUROS		10,000 - 100,000 EUROS		100,000 - 500,000 EUROS		500,000 - 2.5 MLN EUROS		MORE THAN 2.5 MLN	
Shareholders only individuals	3,202	79.2%	1,008	52.0%	108	38.0%	21	28.4%	**2**	**16.7%**
Shareholders only legal entities	143	3.5%	93	4.8%	28	9.9%	12	16.2%	**0**	**0.0%**
Shareholders are individuals and legal entities	699	17.3%	836	43.2%	148	52.1%	41	55.4%	**10**	**83.3%**
total	4,044	100.0%	1,937	100.0%	284	100.0%	74	100.0%	**12**	**100.0%**
Totale	**4.044**	**100,0%**	**1.937**	**100,0%**	**284**	**100,0%**	**74**	**100,0%**	**12**	**100,0%**

Source: InfoCamere

Looking at the value of production, the highest percentage of startups owned only by individuals is found among those with values of less than €100,000. The prevalence of shareholder bodies consisting exclusively of individuals decreases as the turnover rises; conversely, the percentage of startups owned by at least one legal entity gradually rises to a maximum, in the highest classes. Startups owned only by legal entities display more sustained increases.

Table 2.1.j: Distribution of innovative startups by type of shareholder and class of value of production

	0-100,000 EUROS		100,001 - 500,000 EUROS		500,001 - 2,000,000 EUROS		2,000,001 - 5,000,000 EUROS		N.A.	
Shareholders only individuals	1,631	67.0%	595	57.8%	124	50.2%	14	35.9%	**1,991**	**72.3%**
Shareholders only legal entities	77	3.2%	43	4.2%	21	8.5%	7	17.9%	**128**	**4.6%**
Shareholders are individuals and legal entities	658	27.0%	372	36.2%	100	40.5%	17	43.6%	**588**	**21.4%**
not defined	68	2.8%	19	1.8%	2	0.8%	1	2.6%	**47**	**1.7%**
Total	**2,434**	**100%**	**1029**	**100%**	**247**	**100%**	**39**	**100%**	**2,754**	**100%**

Source: InfoCamere

In the sectors of industry in which innovative startups mainly operate, the concentration of startups owned exclusively by individuals is significant in the field of information and communication services. However, there is a greater concentration of corporate-owned startups in the manufacturing sectors. Research and development shows an interesting trend, for those startups owned only by legal entities.

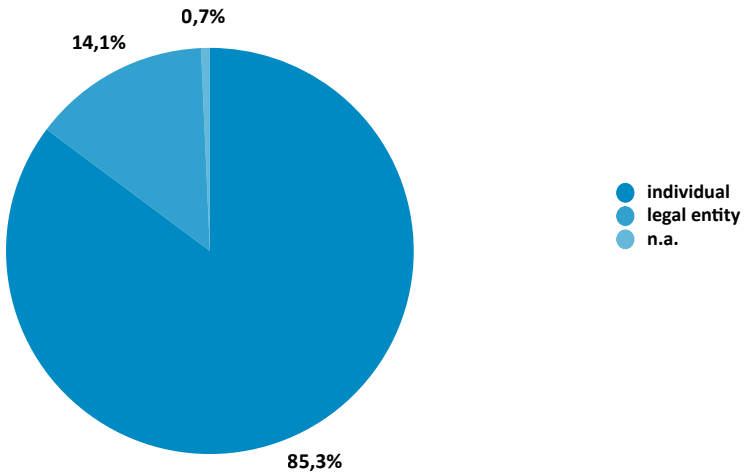
Table 2.1.k: Distribution of innovative startups by type of shareholder and business sector

	INFORMATION TECHNOLOGY AND SOFTWARE		R&D AND PROFESSIONAL/ TECHNICAL ACTIVITIES		INDUSTRY AND CONSTRUCTION		OTHER		TOTAL	
Shareholders only individuals	1,829	68.4%	1,136	66.5%	839	63.6%	551	68.7%	**4,355**	**67.0%**
Shareholders only legal entities	90	3.4%	85	5.0%	75	5.7%	26	3.2%	**276**	**4.2%**
Shareholders are individuals and legal entities	707	26.4%	448	26.2%	387	29.3%	193	24.1%	**1,735**	**26.7%**
not defined	47	1.8%	40	2.3%	18	1.4%	32	4.0%	**137**	**2.1%**
total	**2,673**	**100.0%**	**1,709**	**100.0%**	**1,319**	**100.0%**	**802**	**100.0%**	**6,503**	**100.0%**

Source: InfoCamere

Looking at the analysis of shareholder bodies, it can be seen that 85.3% of shareholders are individuals (22,566), with 14.1% being legal entities (3,723)[12].

Figura 2.1.17: Distribution of shareholders: individuals/legal entities



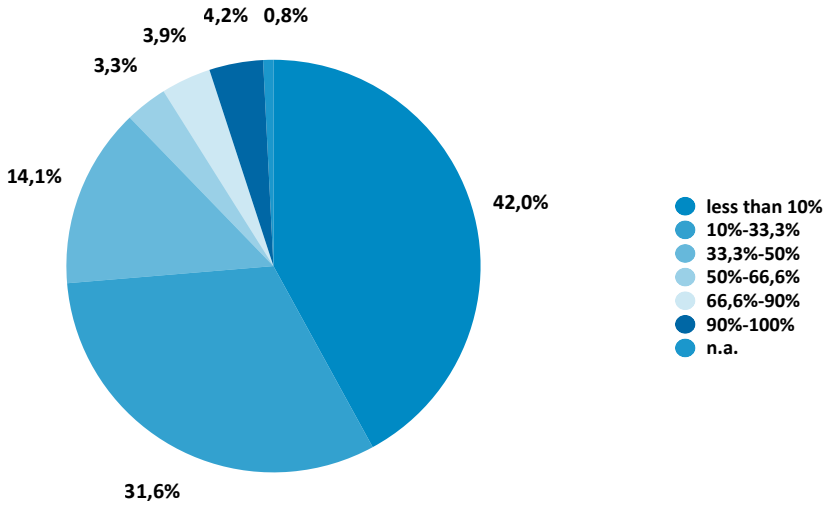
Source: Based on InfoCamere data

The vast majority of shareholders, whether individuals or corporate, hold only a minority share of the company's capital: 87.7% and 85.3% respectively. As can be seen from Figure 2.1.18 and Figure 2.1.19, the distribution is similar for both categories: 42% of individuals and 41.1% of legal entities hold less than 10% of the shares in a company. Just under 32% control between one-tenth and one-third, and the percentage of those owning between one-third and one-half of

12 No details are available for 175 shareholders.

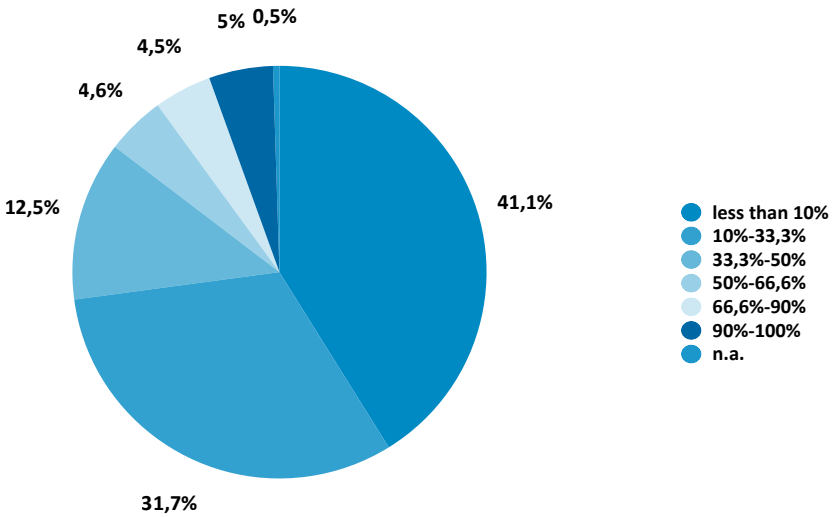
shares is slightly higher among individuals. This is due to a more pronounced trend for individuals to hold exactly 50% of the shares: they account for 6.3% of the total compared to 3% for corporates. The remaining 11.4% of individuals and 14.1% of corporate shareholders hold a majority share in the innovative startup. In this case it is more common to find shares of more than 90% of the total: 4.2% for individuals and 5% for legal entities.

Figura 2.1.18: Distribution of shareholdings held by individuals



Source: Based on InfoCamere data

Figura 2.1.19: Distribution of shareholdings held by legal entities



Source: InfoCamere

The table below shows that, with regard to the distribution by class of nominal value of shareholdings, both the individuals and the legal entities have higher percentages in the "*Up to 4,999 euros*" class, and the figures decrease as the shareholding classes increase; however, the decrease is more limited for legal entity shareholders who have relatively significant presences in the higher classes.

Tabella 2.1.I: Distribution of shareholders by class of nominal value of shareholding

Shareholding (euros)	Legal entities		Individuals	
Up to 4,999	2,169	58.3%	15961	70.7%
5,000-9,999	552	14.8%	3171	14.1%
10,000-24,999	434	11.7%	1774	7.9%
25,000-99,999	346	9.3%	947	4.2%
100,000-499,999	130	3.5%	188	0.8%
Over 500,000	30	0.8%	32	0.1%
N.A.	62	1.7%	493	2.2%
Total	**3,723**	**100.0%**	**22566**	**100.0%**

Source: InfoCamere

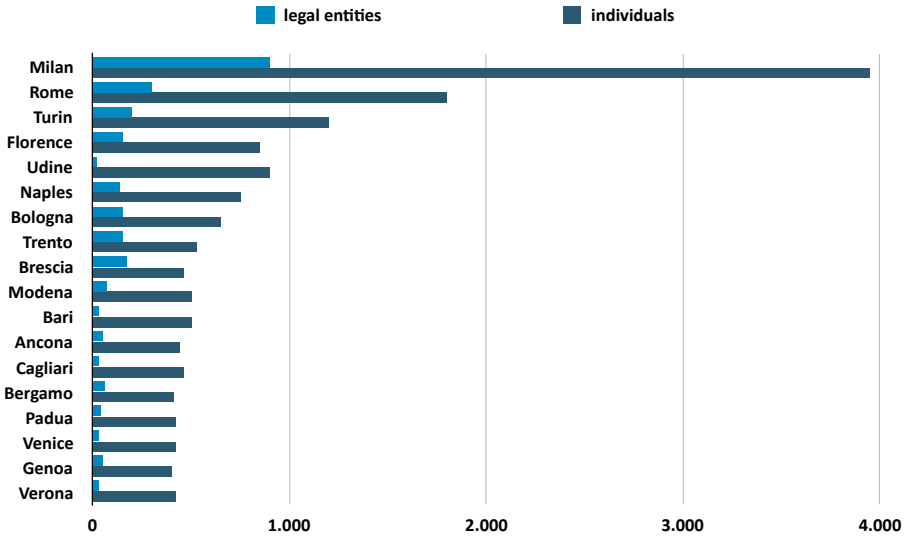
This difference can be seen in the average value of the shareholding among individuals, for which it is €7,569, and for legal entities, for which it is €31,687. Overall, the total shareholdings in innovative startups by individuals amount to €170,805,023, and to €117,969,322 for legal entities.

For individuals, the provinces with more than 100 investors with the highest average figures are Reggio Calabria (€31,592), Padua (€24,252) and Teramo (€22,312); the highest average figure in absolute terms was found in the province of Gorizia, where 21 individual investors held shareholdings with an average of €55,720. For corporate investors, considering provinces with at least 20 investors, the top provinces were Genoa (€403,212, 71 shareholders), followed at some distance by Forli-Cesena (€150,297) and Bologna (€86,744). The province with the highest average shareholding was Reggio Calabria (€726,219), however there were just eight investors.

In line with the formation trend for innovative startups as a whole, most of the individual shareholdings in the businesses currently listed on the Register were started in the past two years: 25% in the first 10 months of 2016 and 30% in 2015, with limited differences between individuals and legal entities. 22% of the current investments were made in 2014, 13% in 2013, and just over 10% in 2012 and prior years.

The provinces with the largest number of shareholders in innovative startups are Milan (3,929 individuals; 838 legal entities), Rome (1,773; 323) and Turin (1,210; 164).

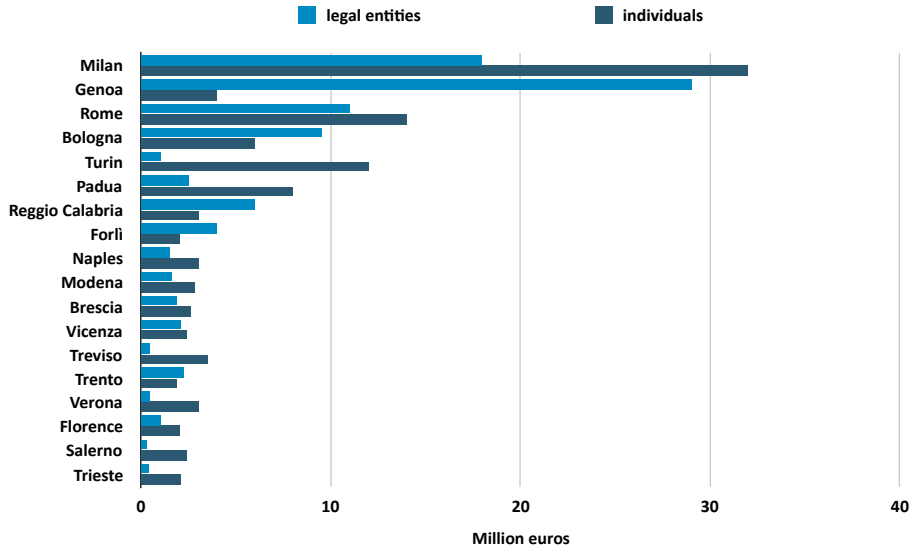
Figura 2.1.20: Distribution of shareholders by province



Source: Based on InfoCamere data

Looking at the value of shareholdings in terms of provincial distribution, the top provinces are Milan (€32.9 million for individuals; €18 million for legal entities), Genoa (€3.4 million; €28.6 million) and Rome (€13.8 million; €11.1 million). It can be seen that the figure for legal entities with shareholdings in startups in Genoa is more than eight times higher than the figures for individuals. For startups based in the provinces of Bologna, Reggio Calabria and Forli, the overall values for the shareholdings of legal entities tend to be double those for individuals.

Figure 2.1.21: Total value of shareholdings by province



Source: Based on InfoCamere data

2.1.7 Distribution by sector

Based on the distribution by sector (Figure 2.1.22), according to the Ateco 2007 classification, the great majority of innovative startups (75.12%) operates in the field of business services.

The clearly prevalent activities are those of information and communication services (business section "J": 41.55% of the total), principally the field of software production and IT consulting (Ateco "J 62": 30.10%); this is followed by scientific research and development ("M 72": 14.8%) and the other professional, scientific and technical activities (from "M69" to "M75" excluding "M72": 11.9%).

Only 18% of innovative startups operate in the sectors of industry and crafts.

The main types of business within the manufacturing sector were computer manufacturers and electronics/optical products ("C 26": 3.8%), machinery and equipment ("C28": 3.4%) and electrical appliances ("C27": 2.2%).

Finally, commerce only accounts for 4.7% of the total.

The weighting of innovative startups among the total joint-stock companies operating in the scientific R&D sector is 24%; the weighting for the IT consulting and software production segment is 7.1%. Both values appear to be particularly significant if compared against the total ratio of innovative startups to total joint-stock companies, of 0.4%.

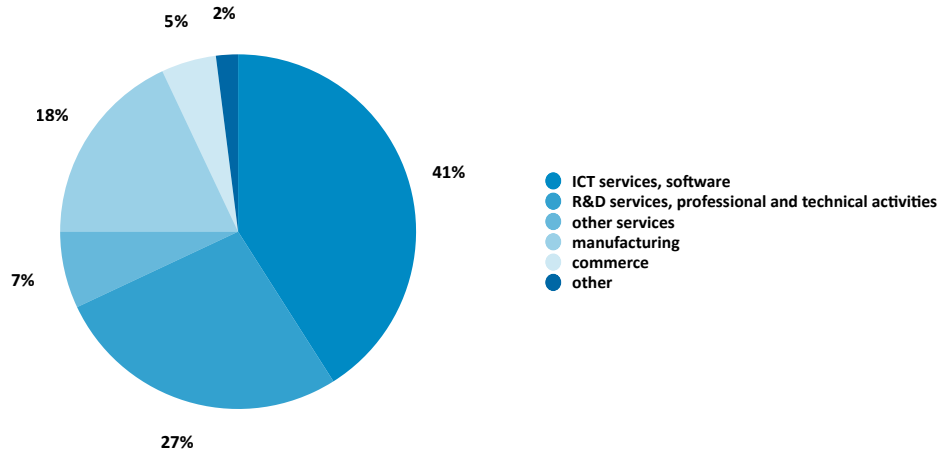
Clearly, the Ateco classification is not particularly precise nor representative in describing the exact type of product or service offered by the company: one example is code C 26, which encompasses the production of computers, electronics and optical products in a single category.

As by definition these are innovative products and services, the problem is amplified in this case, especially as many digital economy businesses have different models: one example is products from the Internet of Things sector, which incorporates both hardware and software.

Taken against the background of growing "service packaging" of the manufacturing sector – whereby a product is no longer offered or sold on a stand-alone basis but is supplied in combination with the service – the data on the distribution between the services and manufacturing sectors tends to become blurred.

Because of these difficulties, the #ItalyFrontiers platform, which was launched in October 2016 by MISE in collaboration with the Chamber of Commerce network (see paragraph 5.6), takes a completely different approach: the Ateco standards are supported by self-descriptive tags, which keywords selected by the business itself according to its own perception of its activity, to make the nature of its business easier to identify.

Figure 2.1.22: Innovative startups in the main sectors of the economy



Source: Based on InfoCamere data

2.1.8 Innovation criteria selected at registration

In order to be classified as an innovative startup, a company not only needs to meet all the criteria stipulated in Art. 25(2)(b)-(g) of decree-law 179/2012, but must also meet at least one of three additional characteristics which are designed to specifically categorise the type of innovation in the company's activity. These criteria are listed in Article 25 (2) in subparagraph h):

a. A minimum of 15% of expenses on R&D, on the higher of the cost, and total value, of production;

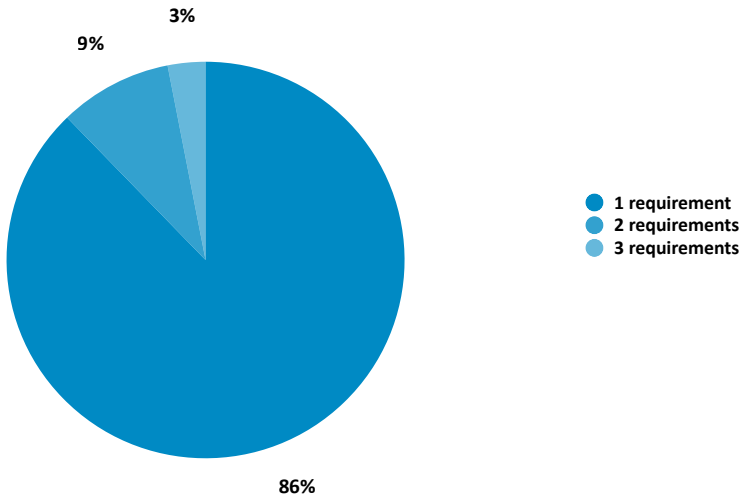
b. one-third of the workforce made up of PhD holders, PhD students or researchers, or alternatively two-thirds employees with a "second cycle" degree or equivalent;

c. Proprietor in the company, depository agent or patents holder, or proprietary firm of the original registered software, provided that it relates directly to the company's corporate object.

On the basis of the updated InfoCamere data (30 June 2016), 86% of innovative startups selected only a single criterion from among those required for registration in the special section. 9% confirmed that it met two of the criteria while only 3% possessed all three (Figure 2.1.23)[13].

13 The database contains no requirements for 95 startups.

Figure 2.1.23: Distribution of innovative startups according to number of requirements

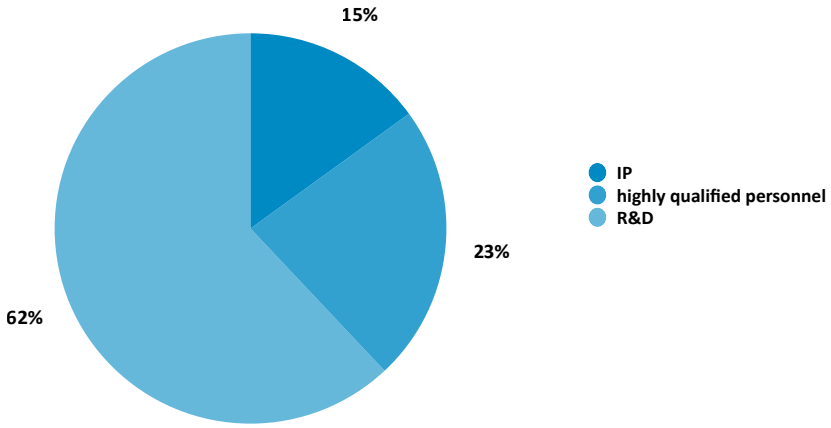


Source: Based on InfoCamere data

The distribution by number of innovation criteria has no significant differences based on macro-economic sectors and geographical areas.

Of the companies that confirmed that they only met a single criterion, in 62% of cases they were companies that spend more than 15% of their own turnover or total costs, on R&D. 23% use highly qualified personnel in an amount sufficient to exceed the legal threshold, while in 15% of cases the company has an industrial patent or original registered software (Figure 2.1.24).

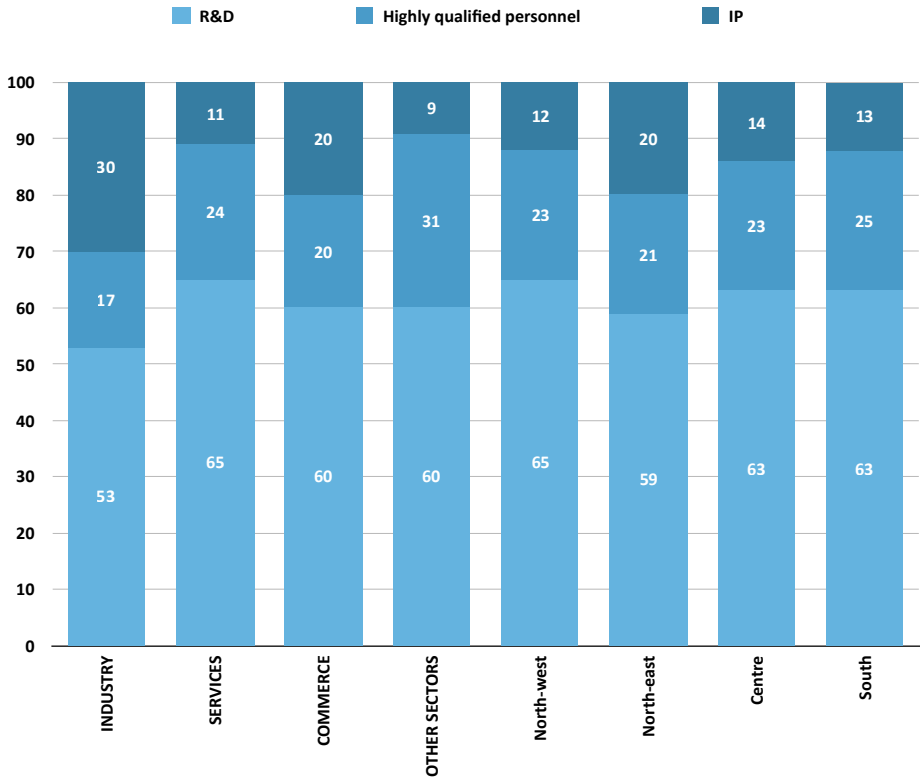
Figure 2.1.24: Distribution of innovative startups with one criterion



Source: Based on InfoCamere data

The weighting of companies that hold patents or software is relatively higher in industry and commerce, and in the north-east (Figure 2.1.25).

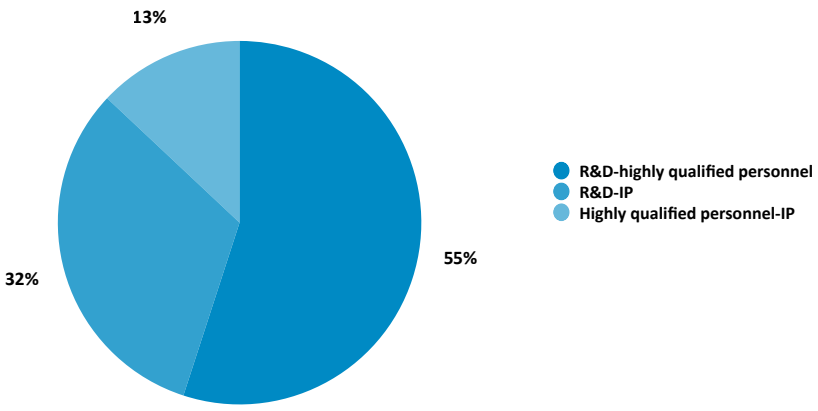
Figure 2.1.25: Distribution of innovative startups that satisfy one requirement per sector and geographical area



Source: Based on InfoCamere data

Of the companies indicating they satisfied two criteria, 55% spend over 15% of turnover on R&D and also employ highly skilled staff. 32% exceed the thresholds of expenditure on research and are in possession of industrial property rights or registered original software. The remaining 13% of cases have qualified staff and at least one industrial property right (Figure 2.1.26).

Figure 2.1.26: Distribution of innovative startups meeting two criteria



Source: Based on InfoCamere data

At sector level, the share of companies that spends more than 15% of sales on R&D and simultaneously employs highly skilled staff, is relatively higher in Services. In industry, the proportion of innovative startups spending heavily on research and owning an industrial patent or original software, is relatively higher.

At sector level, the share of companies that spends more than 15% of turnover on R&D and simultaneously employs highly skilled staff, is relatively higher in Central Italy.

There are 183 companies that have self-certified their compliance with all three innovation criteria: 42% are located in the North (22% Northwest, 18% north-east), 31% in the South, and 27% in Central Italy. 72% operate in the sector of Market services, 22% in industry.

2.1.9 Social and clean tech startups

The definition of innovative startups in Decree-Law 179/2012 (Article 25, Section (2) does not provide for limitations related to business sectors, because the main aim of the scheme is to promote technological innovation in all productive sectors.

The only prescribed differentiation in the definition covers innovative startups with a "social goal" (SIAVS). Under Article 25, Section (4), SIAVS have the same requirements as other innovative startups, but they operate in certain specific areas that Article 2, Section (1) of Legislative Decree 155/2006, which governs social enterprise, considers to have significant social value[14].

As SIAVS' not only have a business ethic but also a corporate object of a social nature, they can be riskier for investors. For this reason, investors supporting this type of innovative startup are rewarded with a larger bonus: if they are an individual they will benefit from a personal income tax deduction of 25% instead of the 19% normally applicable; legal entities benefit from a corporation tax deduction of 27% instead of 20%.

Circular 3677/C issued by the Ministry of Economic Development on 20 January 2015 introduced a new structured procedure for recognition of SIAVS. It takes the form of a self-certification, by which the company:

1. declares that it is operating exclusively in one or more of the sectors listed in Article 2, Section (1) of Legislative Decree 155 of 24 March 2006;
2. identifies the sector or sectors in question;
3. declares that it is pursuing an aim that is in the public interest, whilst working in that area;
4. undertakes to provide evidence of the social impact that it generates.

14 The sectors identified in that measure are: social service, medical services, education and training, protection of the environment and ecosystems; cultural heritage; social tourism; University and post-university education; research and delivery of cultural services; extra scholastic training, aimed at preventing low school attendance and at encouraging academic success; instrumental services for social enterprises provided by bodies comprised at least 70% of an organisation that exercises a social enterprise.

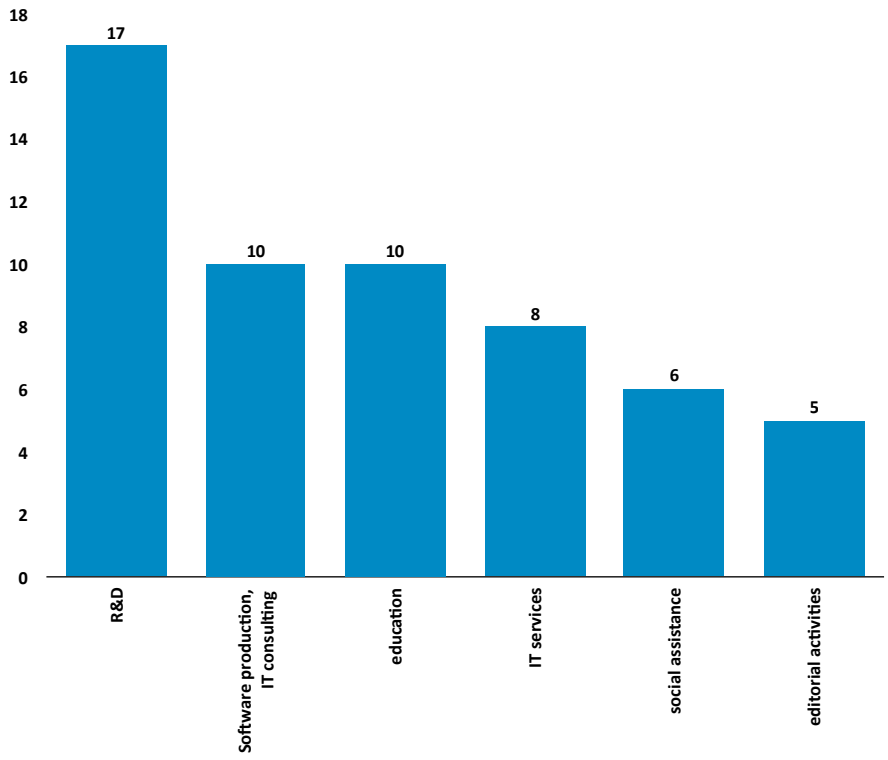
SIAVS are required to draft and electronically transmit, to the competent Chamber of Commerce, the "Social impact report", when submitting their self-certification. This must be resubmitted annually, when confirming compliance with the criteria as required by Article 25(15) of Decree-Law 179/2012. The "Social impact description document" covers:

- an expected impact in the case of startups or in any case not yet achieved at the time the first financial statements are filed;
- an impact generated in the case of enterprises that have already filed their first financial statements.

On 30 June 2016, 93 SIAVS' were listed in the special section.

At sector level, according to the 2007 Ateco classification, 17 companies operate in research and development, 10 in software production and IT consulting, and training (Figure 2.1.27).

Figure 2.1.27: Innovative social enterprises by sector of economic activity

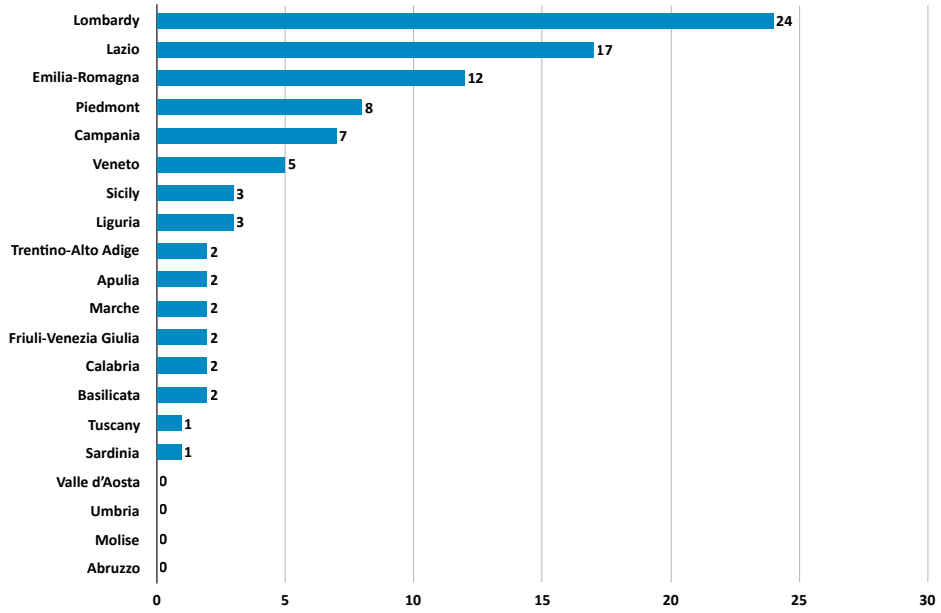


Source: Based on InfoCamere data

Innovative social startups are present in particular in the north-west of the country (35) followed by the north-east (21) and central Italy (20). At the bottom of the ranking is the South of Italy, which had 17 innovative social enterprises as of 30 June 2016.

As for the population of innovative startups taken as a whole, the region with the largest number of SIAVS' is Lombardy: 25.8% of social startups are based in this region compared to 21.7% of all the companies listed in the special section. Next is Lazio with 18.3% (10.1% of innovative startups), and Emilia Romagna with 12.9% (11.9% of innovative startups). In fifth place is one of the southern regions, Campania with 7.5% of Italian SIAVS'(compared to 6.2% of innovative startups). The second region in the South is Sicily, with 3.2% (4.6%) (Figure 2.1.28).

Figure 2.1.28: Regional classification by number of SIAVS'



Source: Based on InfoCamere data

Only a small number of SIAVS' has already filed financial statements; therefore the figures for value of production are only available for 37 businesses. 26 SIAVS' fall into class A, from 0 to 0.10 million euro, while there are nine in class B (0.11-0.50), and two in class C (0.51-1.00).

Looking at the figures for employment, a study of the 38 businesses for which information is available shows that most of the SIAVS' are micro-businesses; 30 of them are in class A (0-4 employees), five in class B (5-9 employees) and three in class C (10-19).

Together with innovative social startups, there is another type of innovative enterprise that offers the same benefits for investors: a business that develops and markets innovative products or services of a high technological value in the energy industry. While the SIAVS' are identified by the flexible procedure described above, this second type is classified by checking that the principal and

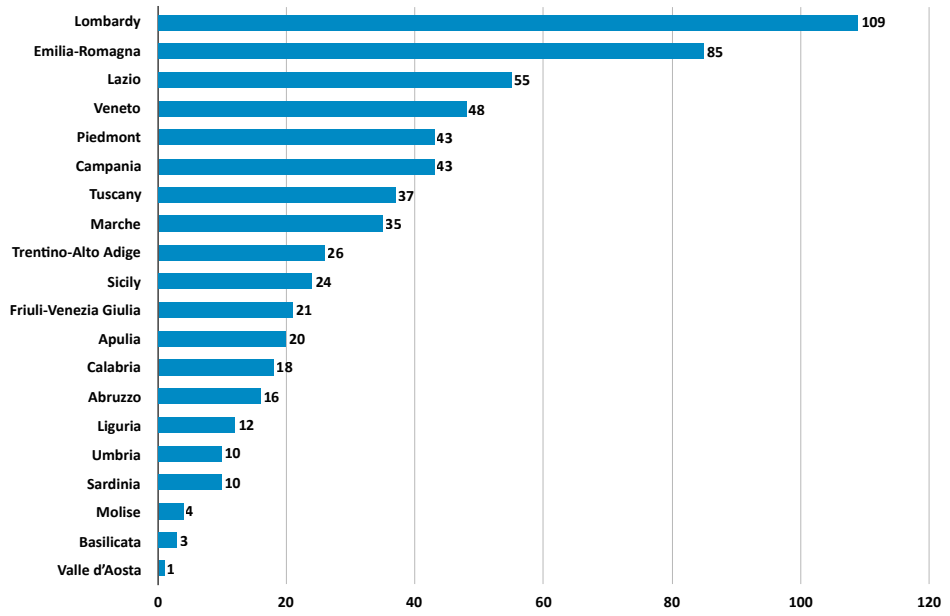
secondary activities of the company match a restricted list of Ateco 2007 codes[15].

On 30 June 2016, 620 clean tech energy startups were listed in the relevant section of the Chamber Of Commerce Register.

Most of these companies operate in the Research and Development sector, particularly in the field of natural sciences and engineering (66.9% of all clean tech startups), and in biotechnologies (20%).

The regional distribution of clean tech innovative startups shows a slight prevalence in the north-east of Italy (29%); followed by the North West (26.6%), the South (22.3%) and Central Italy (22.1%). The region with the highest number of clean tech startups is Lombardy with 109 (17.6% of the national total); this is followed by Emilia Romagna with 85 (13.7%). In the south of the country, the clean techs are most commonly found in Campania (43 clean tech startups, 6.9% of the national total) and Sicily with 24 (3.9%) (Figure 2.1.29

Figure 2.1.29: Regional classification by number of clean tech startups



Source: Based on InfoCamere data

The provinces of Milan and Rome, with 58 and 46 clean tech startups respectively, are ranked first and second in the national classification. They are followed by Turin (31), Bologna (27) and Naples (23).

Looking at the value of production, a figure that is available for 284 cleantech startups, it can be seen that 197 of them fall into class A (0-0.10 million euro), 71

15 The decree of 30 January 2014, issued jointly by MISE and the Ministry for Economic Development , outlines the scope of application of special rates for innovative hi-tech energy startups in a list of annexed Ateco 2007 codes.

in class B (0.11-0.50), 10 in class C (0.51-1.00), 4 in class D (1.01-2.00), and two in class E (2.01-5.00).

Looking at the figures for employment, taken from 233 National Insurance accounts, it emerges that most clean tech companies are micro- or small businesses. 194 of them are in class A (0-4 employees), 31 in class B (5-9 employees) and 8 in class C (10-19).

2.1.10 Economic performance: a comparison between 2014 and 2015

The figures provided by the Chamber of Commerce network as of 30 September 2015 allow a comparison of the economic performance of innovative startups between 2014 and 2015. There was a significant increase in production, which rose from just over €320 million in 2014 up to almost €600 million in 2015: the impact of the startup population on Italy's manufacturing sector is becoming increasingly important. The comparison between the two years does however show a decline in terms of operating profit which was negative by just over €88 million in 2015 compared to 61 in the previous year. This is accompanied by average ROI and ROE profitability indicators that are still negative.

Looking at the economic performance of innovative startups even more closely, it can be seen firstly that the average value of production calculated on the 3853 innovative startups for which financial statements were available for 2015 is just under €152,000. The increase compared to 2014 is considerable – more than €38,000; the median value of production has also increased from €21,303 in 2014 up to 30,860 in 2015. Assets, on average, amount to approximately €274,000 per company (+60,000 euros in 2014), with a median value of €74,000 (+12,000).

Given the increase in the number of innovative startups filing at least one set of accounts (the figure was 2,860 in 2014) and the average value of production, the total output of innovative startups has risen significantly between 2014 and 2015. Total production recorded in 2015 was – as mentioned – €585,211,807, while it barely exceeded €325 million in 2014. In comparison with the increase in production, the level of fixed assets to total assets is still at a significant level: the ratio is 29.4%, which is almost 9 times higher than the average figure recorded for standard joint-stock companies (3.3%). The high ratio of fixed assets to total assets indicates a buoyancy in the level of investments made by innovative startups, at a time when there is a general "strike" on investments within the economy[16]. A recent study by the Bank of Italy (July, 2016 – a more detailed analysis can be found in paragraph 6.2) confirms the solidity of the investment base for innovative startups. The report shows that the companies in the special section of the Business Register have been particularly aggressive in terms of investing, compared to more recently-incorporated businesses which, despite operating in an innovative hi-tech environment, are not registered in the special section. In particular, the rate of investment for the first type of startup is almost

16 As was highlighted in the latest Bank of Italy Bulletin (October 2016), in 2016 the level of investments was almost 30% lower than the levels reached in 2007.

double, around 11 percentage points higher in the period 2013-2014, compared to the second type.

The total operating income of innovative startups was negative by just over €88 million: it was also negative in 2014, by 61 million. The percentage of innovative startups showing a loss is still prevalent: 57.1%, just over the figure of 56.54% in 2014. The ratio of loss-making companies among innovative startups is significantly higher compared to the figure recorded among joint-stock companies overall, which was 34.67%. The financial structure of innovative startups is slightly better than that for joint-stock companies as a whole; loss-making startups show a financial situation that is worse than average.

As a result of the significant number of loss-making companies, the ROI and ROE profitability indicators for innovative startups are negative. Looking at profit-making companies only, which represents 42.9% of all the startups currently listed on the Register, the indicators are significantly better than those for other joint-stock companies (ROI: 0.11 compared to 0.03; ROE: 0.25 compared to 0.04).

For each euro of production, innovative startups generate, on average, 18 cents of added value. This figure is an improvement on the one for 2014 (15 cents) but is lower than that for the population of joint-stock companies (21 cents). Looking at profit-making companies only, startups generate more added value compared to joint-stock companies (32 cents compared to 22).

2.1.11 Main economic indicators in 2013 and 2014

The analysis on the financial and occupational performances of innovative startups, seen in the above paragraphs, are based on Chamber of Commerce data that as mentioned has the benefit of being more up-to-date. This paragraph deals with aspects of employment and the economic performance based on Istat sources (the Asia and Frame/SBS archives). The advantage of using Istat data compared to Chamber of Commerce information is that Istat provides a systematic, structured and dynamic comparison of economic and occupational performance, as against Italian businesses overall.

The Asia-Frame/SBS data matches the European statistical definitions on the measurement of company structure and the economic variables of employment. It focuses closely on the accuracy of figures for employees and freelance workers. Financial statements are just one of the sources used for the system, as Asia-Frame/SBS taps into a large number of other sources: information on foreign trade, the register of workers' individual pay records and others.

Although the analysis on economic performance goes no further than 2014, and therefore the descriptive field is limited to those companies incorporated before or during that year, this statistical source provides a reconstruction of the companies' economic profiles by taking into account new aspects such as the productivity of labour and added value.

The trend was then compared against the average trend for joint-stock companies, particularly those that were recently incorporated. For example, looking at homogenous groups of companies incorporated in recent years, the change in the

median value of the productivity of labour in the period 2013 and 2014 was found to be higher for innovative startups (+17.3% compared to +12.0 for the sample representing other recently incorporated joint-stock companies). For 2015, it was also possible to obtain an in-depth study of the trend in employment.

Employment and the number of shareholders

For 2014, it was possible to reconstruct employment information regarding 2,104 companies, with a total of 3,580 employees (staff employed in any capacity, including self-employed workers). The distribution by economic sector shows a significant weighting towards the services sector, particularly software, research and development, and also in terms of the number of companies and employees.

Table 2.1.m: Number of companies and employees of innovative startups, by sector of the economy (2014)

BUSINESS SECTORS	NO. OF COMPANIES	NUMBER OF EMPLOYEES	%COMPANIES	% EMPLOYEES
Other industry and construction	341	625.7	16.2	17.5
Machinery	76	151.4	3.6	4.2
Commerce, transport	167	286.8	7.9	8.0
Software	624	1294.8	29.7	36.2
Data processing	139	230.4	6.6	6.4
Management consultancy	61	79.2	2.9	2.2
Architects and engineers	72	91.0	3.4	2.5
Research and development	296	364.6	14.1	10.2
Specialised design	31	31.5	1.5	0.9
Other consultancy activities	67	92.7	3.2	2.6
Other services	230	332.0	10.9	9.3
Total	**2,104**	**3,580.1**	**100.0**	**100.0**

Source: Istat

Of these companies, 914 have permanent staff on the payroll (2754 employees). In 2015, the number of companies with employees significantly increased: 4,840 staff were employed in 2,035 companies.

The increase in the number of companies with employees was accompanied by a slight increase in the average size, from 3.0 to 3.1 employees.

Table 2.1.n: Average size in terms of workforce of innovative startups, regional distribution (2014-2015)

BREAKDOWN	2013	2014
North-West	3.5	3.5
North-East	2.8	3.0
Centre	3.0	2.8
South	2.7	2.9
Total	**3.0**	**3.1**

Source: Istat

The increase in the average size was limited, but with differences between regions and economic sector. In the north-east and in the South, the average size of a startup has increased, while in the regions of Central Italy, there has been a decrease.

The largest increase in average size was mainly attributable to the sectors of Commerce, Hotels and restaurants, other industry and construction, and Architects and engineers. The reduction in the design sector was due to the small number of companies involved.

Table 2.1.o: Average size in terms of workforce of innovative startups, by sector

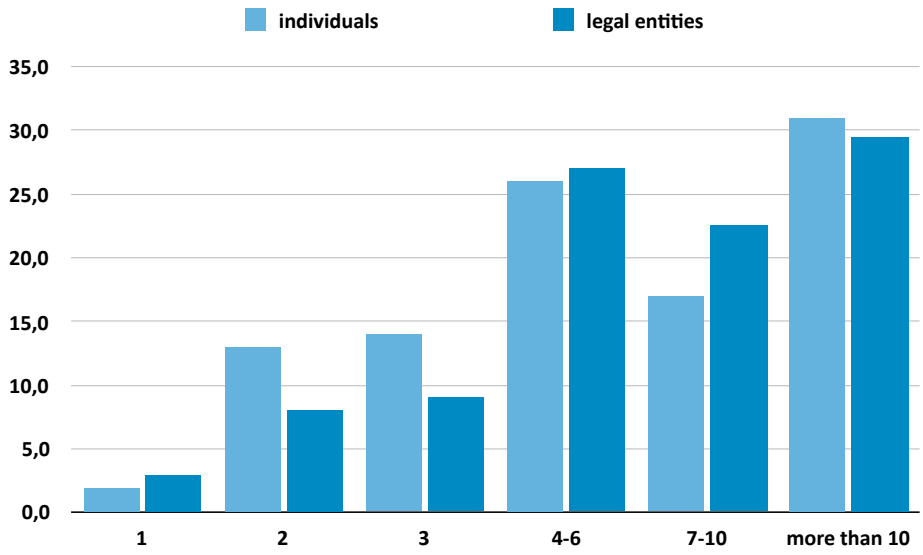
BUSINESS SECTORS	2013	2014
Other industry and construction	3.2	3.7
Machinery	3.3	3.4
Commerce, transport	2.9	3.5
Software	3.4	3.4
Data processing	2.8	2.7
Management consultancy	2.2	1.7
Architects and engineers	2.3	2.9
Research and development	2.6	2.3
Specialised design	2.1	1.7
Other consultancy activities	2.4	2.3
Other services	2.6	2.7
Total	**3.0**	**3.1**

Source: Istat

The increase in average size is even more significant when viewed in relation to companies that had employees in both 2014 and 2015. Of over 900 companies monitored, the average size increased from 3.1 to 4.8 employees.

Looking at the structure of the startups, the composition of the number of shareholders – individuals and legal entities – was analysed. The 1,898 startups for which the shareholder figures were available had a total of 9,131 shareholders, of whom 7,563 (82.8%) were individuals and 1,568 were legal entities. In particular, startup companies are mainly composed of more than 4 shareholders. As can be seen from the figure below, just over 30% of the shareholders – both individuals and legal entities – relate to companies with more than 10 shareholders. Conversely, less than 2% of private individual shareholders are found in companies with a single shareholder. Looking at the demographics, the shareholders of startups are mainly male (81%), with an average age of 44, and Italian nationality (just over 4% were born abroad).

Figure 2.1.30: Percentage distribution of shareholders among innovative startups: size classes (2015)



Source: Istat

Productivity analysis

In 2014, the population of startups for which detailed balance-sheet information was available was as follows[17]:

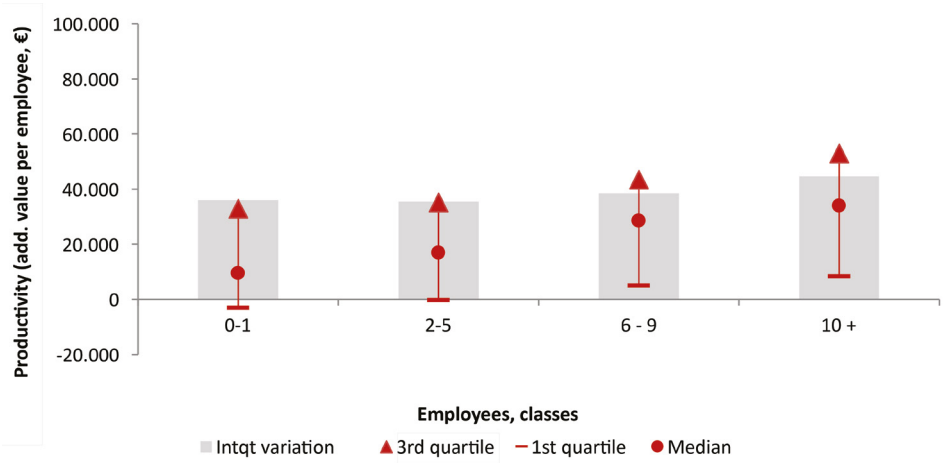
17 The analysis was taken from the new information system used to produce estimates on company income statements (Frame), based on the integrated use of administrative and statistical data. Frame contains information on the income statements of Italian businesses, for all active enterprises (around 4.4 million companies with a workforce of about 17 million).

- 30% have a total annual turnover of more than €100,000, and only 2% have a turnover of more than €1 million;
- In 50% of innovative startups, added value exceeds €10,000 while 30% of cases it is negative;
- On average, the added value per company is €33,000, while labour productivity, which is calculated as the ratio between added value and workforce (the permanent staff and freelance workers employed by the company) is around €19,000 (compared to €52,000 for joint-stock companies with fewer than 100 staff);
- The gross average salary is around €33,000, ranging from a minimum of €23,600 in the management consulting sector up to a maximum of €54,000 for employees of architecture and engineering firms.

The median productivity of labour ranges from €17,000 in innovative startups with up to 10 staff to €34,000 in those with 10 or more staff, showing a positive correlation to the size of the company (Figure 2.1.31).

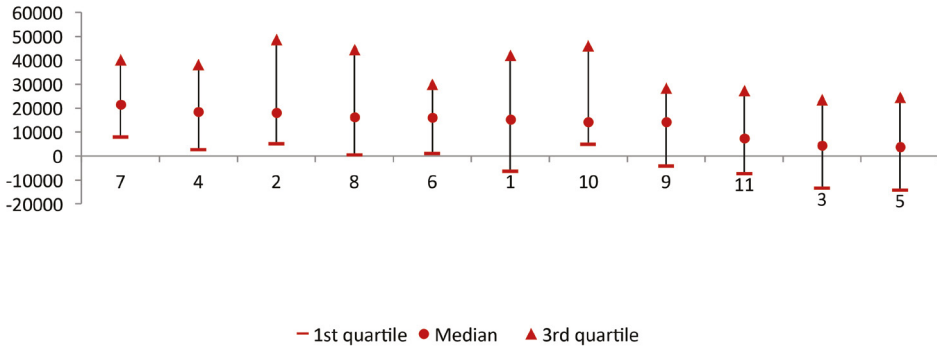
The highest productivity is found in Architecture and engineering firms (more than €21,000 per employee), in software production, IT consulting and related activities, with around €18,000 per staff member (Figure 2.1.32). Negative income statement results were found in various sectors (Other industry and construction – Specialised design – Other services – Commerce and data processing), with more than 25% of innovative startups showing added value of less than zero.

Figure 2.1.31: Productivity of labour in innovative startups, by class of workforce – 2014



Source: Istat

Figure 2.1.32: Productivity of labour (added value per staff member – Euro) in innovative startups, by economic sector – 2014



Key:

1: Other industry and construction

2: Machinery

3: Commerce, transport

4: Software

5: Data processing

6: Management consultancy

7: Architectural and engineering firms

8: Research and development

9: Specialised design

10: Other consultancy activities

11: Other services

Source: Istat

The change in added value per staff member offers food for thought. In 2013 and 2014, the median productivity of labour among innovative startups increased by 4.3% compared to 3.3% for joint-stock companies as a whole (Table 2.1.p). There is a broad diversity of performance both between the populations (joint-stock companies as a whole compared to innovative startups) and among the sectors within the populations. This diversity is particularly evident in the innovative startup segment, where sectors experiencing strong growth (Manufacturing of machinery and equipment not classified elsewhere and specialised design) can be found alongside sectors experiencing a downturn. The decline is particularly noted in the sector of management consulting, which saw a reduction in the median value of added value by staff member of around 30%, in the period 2013/2014 (Table 2.1.p).

The comparison between populations seen in Table 2.1.p is affected by the different characteristics of the compared businesses. On the one hand there

are the innovative startups founded in recent years, and on the other, the joint-stock companies, most of which are mature businesses, which have been on the market for a number of years.

In order to overcome these limitations, a panel analysis was made, between companies founded during the same period. Information was used from: a) panels of innovative startups founded in 2012 and present in 2013 and 2014; b) panels of other startups in the form of joint-stock companies formed in 2012 and present in 2013 and 2014.

The figures shown in Table 2.1.q show a limited consistency both between the two panels and within them, showing that essentially the companies are "similar". The median added value per staff member in 2014 was €24,510 in the panel of "joint stock company startups" and €24,218 in the panel of innovative startups.

Looking at relatively similar populations, the change in the period 2013 and 2014 was notably in favour of the innovative startups, with a more significant change in the median value of the productivity of labour, of 17.3% compared to 12.0% joint-stock companies (Table 2.1.q). In certain sectors of innovative startups, the change was more than 100%. In the manufacture of machinery and equipment not classified elsewhere, in Commerce, Transport, Hotels and restaurants and in Specialised design. The only sector of innovative startups that went against the trend was the one for management consulting services, where there was a decline of 3.1% in the productivity of labour.

Table 2.1.p - Median added value per staff member in the population of innovative startups and among joint-stock companies as a whole – 2013 and 2014[18]

Sector of activity (a)	Joint-stock companies overall (b)			Innovative startups		
	2013	2014	% change 2013-2014	2013	2014	% change 2013-2014
Industry and construction (narrowly defined)	34,921	36,129	3.5	10,561	15,238	44.3
Manufacture of machinery and equipment not classified elsewhere	48,880	50,758	3.8	7,479	18,027	141.0
Commerce, transport, hotels and restaurants	26,438	27,444	3.8	-1,489	4,301	....
Software production, IT consulting and related services	39,354	40,302	2.4	18,436	18,465	0.2
Data processing, hosting and related services; websites	32,704	32,753	0.2	2,975	3,768	26.7
Management consulting services	32,211	32,711	1.6	24,954	16,019	-35.8
Architecture, engineering and other technical firms	37,256	38,553	3.5	25,593	21,476	-16.1

18 According to the Ateco 2007 classification, industry in the strict sense and construction, including category 'B' (Mining and quarrying), 'C' (Manufacturing) excluding Division 28 (Manufacture of machinery and equipment not classified elsewhere), 'D' (Supply of electricity, gas, steam and conditioned air), 'E' (Supply of water, sewerage, waste management and reclamation), 'F' (Construction); Commerce, transport, hotels and catering including the category 'G' (Wholesale and retail; car and motorbike repairs), 'H' (Transport and logistics), 'I' (Hotels and restaurants); Other services including category 'J' (Information and communication services) excluding Group J620 (Software production, IT consulting and related services) and J631 (Data processing, hosting and related services; websites), 'K' (Finance and insurance), 'L' (Real estate), 'M' (Professional, scientific and technical services) excluding Division M72 (Scientific research and development) and Groups M711 (Architecture, engineering and other technical services), M702 (Management consulting), M741 (Specialised design) and M749 (Other professional, scientific and technical services not classified elsewhere), 'N' (Rental, travel agencies, business support services), P' (Education), 'Q' (Health and social care), 'R' (Artistic, sporting, entertainment and recreational activities) and 'S' (Other services). (b) joint-stock companies with up to 100 staff. In Other services, the population of joint-stock companies did not include the category 'K' (finance and insurance), in accordance with the SBS (Structural Business Statistics) population.

Sector of activity (a)	Joint-stock companies overall (b)			Innovative startups		
	2013	2014	% change 2013-2014	2013	2014	% change 2013-2014
Scientific research and development	35,414	38,028	7.4	16,280	16,128	-0.9
Specialised design services	33,868	34,737	2.6	5,786	14,235	146.0
Other professional, scientific and technical services not classified elsewhere	34,296	35,088	2.3	19,732	14,260	-27.7
Other services	27,005	28,021	3.8	10,207	7,429	-27.2
Total	30,651	31,661	3.3	13,597	14,184	4.3

Fonte: Istat

Table 2.1.q - Median added value per staff member in the population of innovative startups and among joint-stock companies as a whole – 2013 and 2014

Sector of activity (a)	Joint-stock companies overall (b)			Innovative startups		
	2013	2014	% change 2013-2014	2013	2014	% change 2013-2014
Industry and construction (narrowly defined)	28,474	29,874	4.9	18,271	27,684	51.5
Manufacture of machinery and equipment not classified elsewhere	40,219	43,367	7.8	15,297	45,420	196.9
Commerce, transport, hotels and restaurants	18,450	21,292	15.4	3,350	7,501	123.9
Software production, IT consulting and related services	29,340	32,862	12.0	23,423	25,211	7.6
Data processing, hosting and related services; websites	25,576	27,704	8.3	-640	11,693	-
Management consulting services	28,090	30,215	7.6	28,074	27,196	-3.1

Sector of activity (a)	Joint-stock companies overall (b)			Innovative startups		
	2013	2014	% change 2013-2014	2013	2014	% change 2013-2014
Architecture, engineering and other technical firms	32,011	36,818	15.0	31,898	35,028	9.8
Scientific research and development	27,232	32,873	20.7	20,334	20,759	2.1
Specialised design services	25,488	33,111	29.9	693	28,359	3,995.1
Other professional, scientific and technical services not classified elsewhere	25,646	27,225	6.2	23,855	30,410	27.5
Other services	18,117	20,966	15.7	20,235	21,788	7.7
Total	21,877	24,510	12.0	20,642	24,218	17.3

Fonte: Istat

2.1.12 Online presence

In April this year, the online marketing firm Instilla Srl published a survey (SEO 2016 Startup Report) on the online presence of innovative startups listed in the special section at the end of 2015. The study showed, first of all, how many companies said that they had their own company website, and checked whether the website address recorded on the Register was in operation, or whether the domain was inactive, the sale or the site was under construction. It also gave certain key performance indicators (responsiveness and page speed) for mobile and tablet use.

The study concluded by highlighting that innovative startups are weak in terms of the optimisation of websites for mobile use. This is very rare in Italy: fewer than 10% of the websites were satisfactory for using on mobiles. The comments on survey mainly focused on the number of innovative startups claiming to have their own website: according to Instilla, around 3000, i.e. 58.3%, have their own website while more than one quarter of those addresses was found to be inactive or under construction. However, certain press articles have inaccurately equated the declaration of having a website with actual possession[19], giving the

19 See for example Il Sole24 Ore, "Startup, in Italia solo sei su dieci hanno un sito", infodata.ilsole24ore.com, 3 May 2016. Find the article at: http://www.infodata.ilsole24ore.com/2016/05/03/startup-in-italia-solo-sei-su-dieci-hanno-un-sito-il-trentino-e-la-

distorted idea that almost one out of every two innovative startups does not have a website.

MISE has noted with interest the figures on the performance of startups' websites, which are not surveyed or systematically analysed by the Authority. The free, open publication, with a weekly update of the information contained on the special section provided by the Chamber of Commerce system from the day after the launch of Growth 2.0 Decree, has been designed to provide extensive monitoring of the impact of this decree and to encourage scientific research into the resulting data. The study is a significant example of how a study carefully conducted by independents can make an important contribution to the knowledge of a phenomenon targeted by government policy.

However, compared to the structure of the above survey, the Ministry has chosen a more contextualised interpretation by adding another level of study: the evolution over time in the number of innovative startups registering their websites, as shown in Figure 2.1.33.

This observation was possible from 21 October 2013, when the public database on the special section was supplemented with columns specifically dedicated to innovative startups' websites.

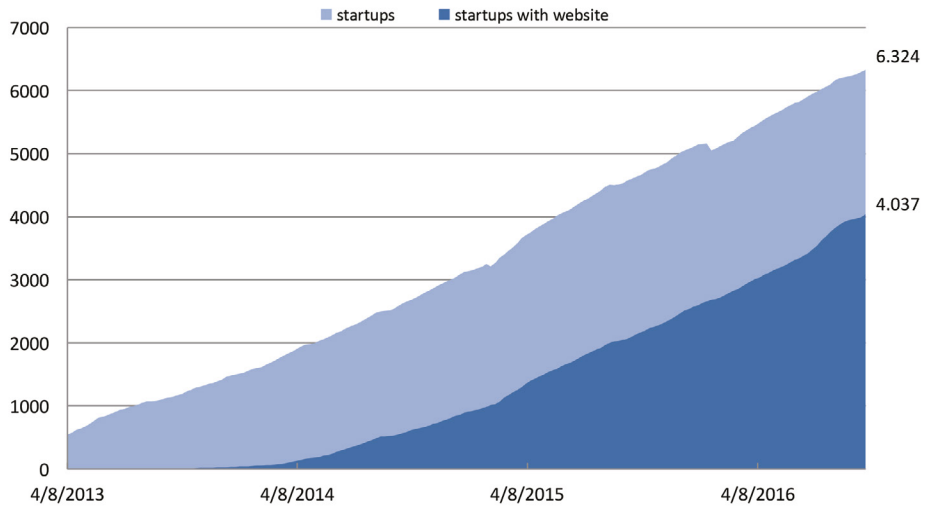
Since that time, there has been a steady rise in the number of websites declared on the Business Register, in line with the trend in registration of new innovative startups in the special section: from October 2013 until 30 September 2016, the number of startups with a website has increased, on average, by more than 26 units per week, and the innovative startups as a whole, by 33.

It is interesting to note that over time the tendency to register a website has gradually increased: since 2015 the average values are almost identical (35.2 compared to 35.7).

Looking at 2016 alone, the number of startups with a website has grown at a much faster pace than the number of registrations of innovative startups (37.5 compared to 31.2). Therefore during this year, on average, more new or recently-registered startups have declared their websites, on average, compared to the number registered in the special section.

regione-con-le-startup-piu-digitalizzate/ [last visit: 20 October 2016].

Figure 2.1.33: Trend in the registrations of innovative startups and registration of corporate websites



Source: Based on InfoCamere data

As of 30 September 2016, 4,062 innovative startups out of 6,323 – 64.2% of the total – completed the "website" field on the company form. This figure is 15 percentage points higher than the figure recorded at the end of 2015, when there were 2636 innovative startups registered, out of 5,145 (51%). The figure is also considerably higher than the one for the end of 2014 (29.2%) and the end of 2013 (2.5%).

If the percentage of coverage recorded on 30 September 2016 is de-aggregated depending on the year of formation, it can be seen that three out of four startups (75%) formed after 1 January 2016 had registered the URL of their website with the Chamber of Commerce. This figure is similar to the companies formed in 2015 (72.2%) and is again higher than the average companies formed in 2014 (66.2%). The more mature companies, the great majority of which were formed before the special section of the Register was set up, have recorded significantly lower figures (50.6% for those formed in 2013, and 43.9% for those formed in 2012 or earlier).

The total figure for website registrations is the result of two separate trends: on the one hand, the vast majority of newly-formed companies tend to indicate their website address. It can thus be assumed that they already have a web presence, or intend to create one in the near future. On the other hand, companies incorporated several years ago have in many cases not registered their website address when registering in the special section but did so subsequently, particularly when providing the periodic updates required by law. Both these aspects appear to suggest "copycat" behaviour, whereby an increasing number of companies has chosen to follow the example of those registering their websites.

For a more comprehensive analysis of the online presence of innovative startups, the presentation of data on the number of declarations should be

supported by a more qualitative approach. As described in the Instilla report, the mere presence of a website does not necessarily mean that the website is functioning or mobile-optimised. It may also be that the website is unreachable either because of a compilation error by the legal evidence about the company, as sometimes occurs, or that the website has not yet been optimised due to lack of time. Often, the startups have only been in existence for a few months.

In any case, for many reasons it is not possible to support the theory of this report, which casts doubt on the innovation potential of these startups by looking only at their online presence. The digitalisation rate – the extent to which innovative startups look after their online presence – is not necessarily connected to their innovative nature, much less is it the only manifestation of this. It may on the other hand represent a good indicator of their stage of development and in particular their sales methods and reference markets; these are aspects that may be of particular interest to a marketing firm such as the one that carried out the study.

As the Italian Startup Act is intended to support and promote technological innovation in all sectors of the economy, particularly knowledge-intensive ones, the ownership of a state-of-the-art website should certainly be seen as an important factor, but it is certainly not essential for all the registered companies and in any case is not decisive in determining their innovation potential.

We can assume for example that a biotech company working in the field of rare disease diagnosis, a high-tech sector with a very long time to market and limited client base, will be far less interested in this aspect than a food delivery company whose online platform is not only a promotional tool but is the key to its core business. However, nothing can be inferred from this, in terms of the innovation potential of the first company compared to the second.

Even if we were to support the theory that a carefully-green, up-to-date digital communication strategy is a good indication of a company's level of innovation, it might be helpful to contextualise the analysis by comparing the online presence of the companies in the special section with all other Italian businesses. However, this type of study can never be done by relying on Register data alone, as standard companies have no obligation to indicate their website address at the time of formation. On the other hand, and this should be noted, innovative startups can do this when completing their free registration in the special section. Firstly, often a newly formed company has not yet registered its own website address. Secondly and even more importantly, they have no incentive to input this information after that, as they would have to pay to do so. This is the case when changing the registration details on the Business Register.

Only a small percentage of standard companies have declared their websites with the Chamber of Commerce (just over 2%), as they do not have the simplified process and important publicity factor that comes from the Special Section for innovative startups. In any case, what is certain is that the figure for the number of registered websites of innovative startups, and even more so for joint-stock companies, is an underestimation of the actual number of websites owned: many companies have simply not registered their addresses.

According to MISE, the main reason for this gap comes from the lack of perceived benefit in recording their online presence on company forms. There is no obligation for a company to report its website address for ordinary email addresses, unlike the certified email address. The special section, in particular the #ItalyFrontiers scheme (see par. 5.6), offers all the companies in the special section their own personal page, where they can use the Registered data to create their own bilingual showcase. The aim is to convert Chamber of Commerce bureaucracy into a useful, effective communication tool and improve the quality of the information available to the public, giving startups and SMEs a new way to showcase their innovations and promote themselves towards investors and potential business partners.

As mentioned in connection with the #StartupSurvey (Chapter 3), in many cases companies ignore this opportunity for publicity. The trends do however show that over time there has been a change in the perception of the benefits of registering websites – companies are now more aware of the importance of having an online presence registered with the Business Register.

2.2 CERTIFIED BUSINESS INCUBATORS

The Growth 2.0 Decree (Article 25(5) and (7) is intended to favour the growth of new innovative businesses by creating centres of excellence, referred to in the Decree as "certified incubators". A business incubator will host, support and accompany the development of new high potential companies, generally from the time the business idea is conceived until the company is effectively set up.

A typical business incubator is based around the provision of services, operational and managerial support, work tools and premises, and also provides informal resources such as networking that puts potential investors into contact with promising business ideas. By providing entrepreneurs with their experience and know-how, incubator managers can help innovative companies to launch their businesses efficiently and quickly, to set up technology transfers with well-established companies looking to remain competitive through open innovation.

The concept of business incubator is a broad one and there are hundreds of organisations throughout Italy that use this title in some capacity. By creating the legal definition of "certified business incubator" the legislator intended to highlight those organisations that correspond fully to this profile: companies that can offer diversified services and most importantly, which have a proven track record in incubating startups.

In order to encourage the emergence of quality incubators, they are now eligible for some of the incentives available to startups. Business incubators are required to register in the special section, and to periodically update their details. In order to register in the section, business incubators must provide a self-certification, confirming that they meet a series of criteria listed in a specific form. The requirements are: having suitable premises, equipment and experienced technical staff and managers, regular collaboration with universities, research centres, public institutions and financial partners. The law also requires incubators to have an adequate level of proven experience in supporting innovative startups.

The aim of this certification is to support the growth in the size and quality of the service provided by business incubators by leverage doing these centres of excellence, which can help to drive stronger growth in the national and local economy.

There were 39 certified incubators at the end of June 2016. Three-quarters of them were located in the north of Italy (Lombardy being the leading region with 14), approximately 25% in Central Italy and just one in the South (Sardinia) (Table 2.2.a).

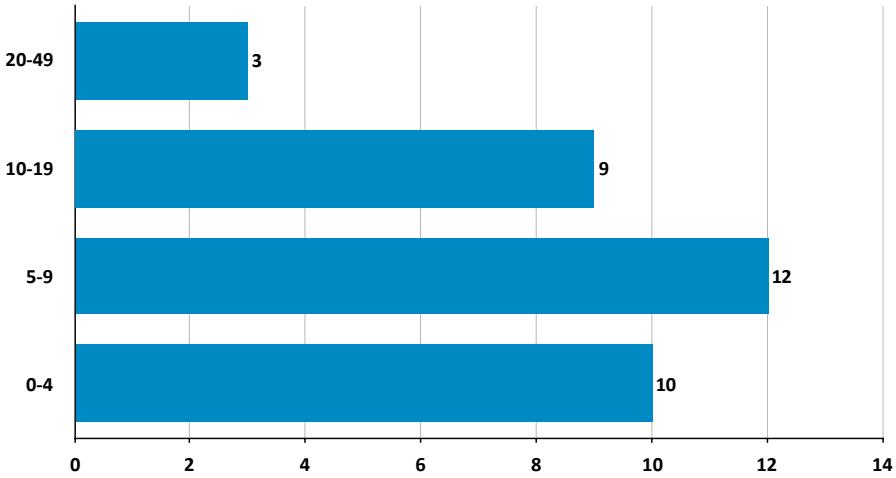
Table 2.2.a: Certified business incubators by region, 30 June 2016

REGION	CERTIFIED INCUBATORS
Lombardy	14
Piedmont	3
North-West	**17**
Veneto	4
Friuli-Venezia Giulia	4
Emilia-Romagna	3
Trentino-Alto Adige	1
North-East	**12**
Lazio	4
Marche	3
Tuscany	2
Centre	**9**
Sardinia	1
South	**1**
Italy	**39**

Source: Based on InfoCamere data

Some of the businesses listed in the special section for certified incubators have a much broader spectrum of activity, other than pure "incubation": this makes it hard to present data on the value of production, share capital and number of employees. There were 13 incubators with a value of production ranging from between €100,000 and €500,000, while 10 of them had a figure between 2 million and €5 million. The social capital of certified incubators ranges from €10,000 (in four cases) up to more than €500,000 (eight incubators). Most certified incubators are small in size, and mostly have between zero and 19 staff (Figure 2.24).

Figure 2.2 1: Number of certified incubators, by size of workforce[20]



Fonte: elaborazioni su dati InfoCamere

In order to provide the legislator with more information about the profiles and roles of certified business incubators, in the development of innovative business in Italy, in recent months MISE commissioned a study – from the specialised consulting firm C.Borgomeo&co – intended to identify a series of aspects that cannot be deduced from InfoCamere data. The study, completed at the end of 2015, related to the 30 certified incubators as of 17 July 2015.

The main findings of the study were as follows:

- Ownership: in 50% of cases, the incubator was publicly owned or mainly publicly owned, with the remaining 50% being privately owned;
- As can be seen from the Register data, incubation is not the principal activity for all the incubation centres. 70% of the certified incubators taking part in the study said that giving support to new businesses was the primary activity;
- The capacity to provide support for startups in the broad sense: the average is 36 companies per incubator, with a minimum of 9 and a maximum of 106;
- The incubation capacity for innovative startups in the strict sense is significantly lower: the average is 13 companies per incubator with a minimum of three and a maximum of 38. Equity research services are provided by just under 40% of incubators.

The study revealed another important aspect about the effects of incubation on innovative startups: in particular, new businesses showed an improved performance in the year 2012, 2013 and 2014 in terms of both turnover and employment, compared to those that had not been incubated. The value of production of incubated startups rose by approximately 15 percentage points

20 The analysis refers to 34 certified incubators. The three centres with more than 50 staff were omitted as only a small fraction of them can be attributed directly to incubation activity in the strict sense. No information was available for a further two.

more, over three years, than the non-incubated counterparts. With regard to workforce, the growth was higher than five percentage points. The study also attempted to identify the level of knowledge of some of the recent industrial policy measures: a high percentage of incubators said that they were aware of such measures, in particular the Italia Startup Visa (90%), which allows a simplified access procedure, if a certified incubator is involved, see par. 4.7 –, while the knowledge of other measures is around 75%. 77% of incubators report that they are aware of the SME Guarantee Fund, but only 10 of them said that they had applied to it.

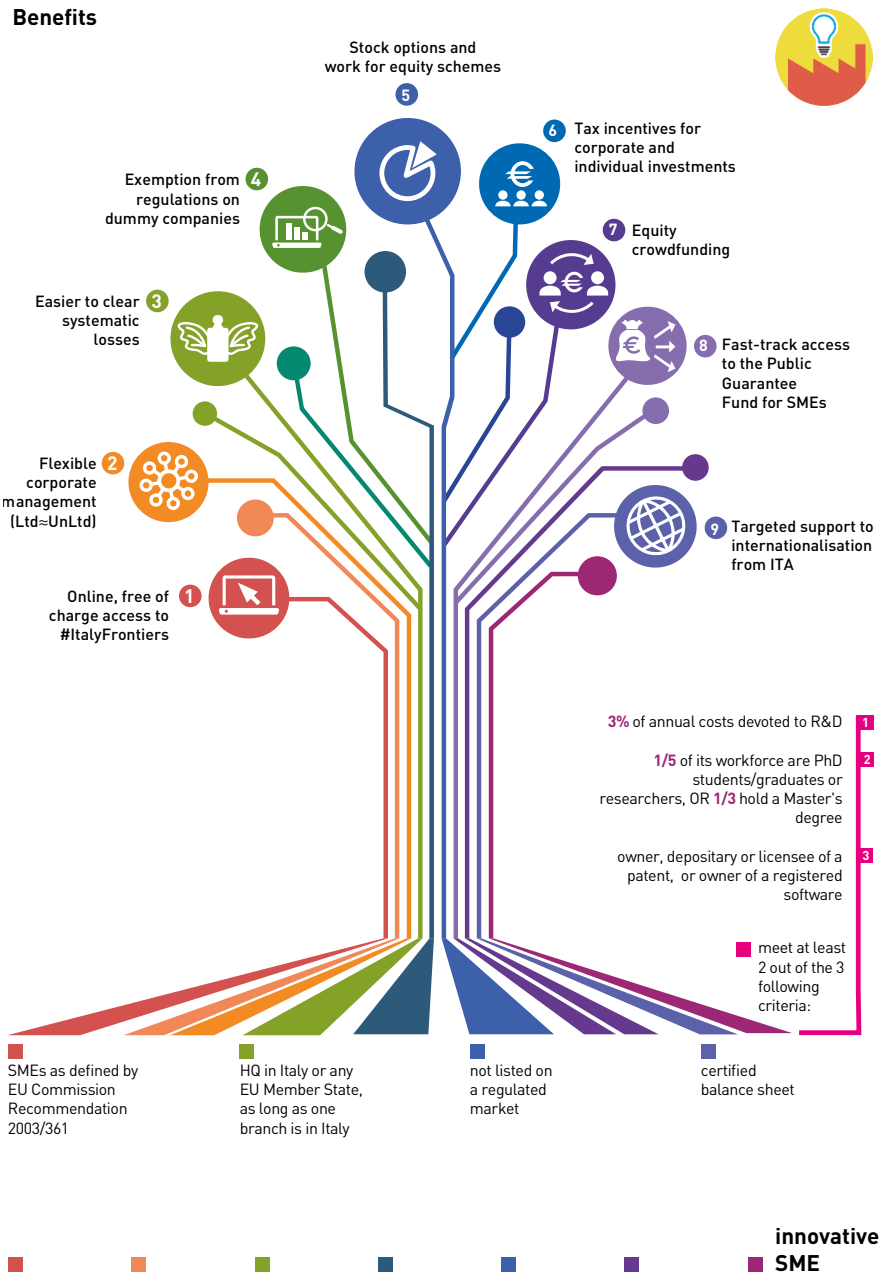
During the survey, the incubator managers were asked to report any problems they had encountered in their day-to-day experience, and on that basis were asked to make proposals or suggestions to progress their work. From a regulatory viewpoint, the managers reported that the differences, in some cases substantial, found among the various incubators were not relevant to the certification criteria. With regard to management in the strict sense, the problem most frequently encountered was the lack of financial coverage for certain pre-incubation activities, scouting and publicity.

The study noted that the financial performance of incubators is often dramatic: overall, they complained of a loss of €2.4 million in 2014, amounting to an average loss of €116,000 for each incubator. This was different from the University incubators which were on average in the black, and those that provide co-working services as part of their services: the operating results of university incubators (around 10, including those registered in 2013 and 2014) was very close to parity with the figure recorded for the other incubators.

In response to these issues, the incubators surveyed called for public intervention on two points: an increase in incentives, resources for training and subsidised finance – and intervention to improve the promotion of incubators such as the creation of an institutional showcase to assist with the visibility, also internationally, of outstanding business incubators.

2.3 INNOVATIVE SMES

With the Investment Compact, the legislator sought to encourage the recognition of all SMEs that have gone beyond the startup stage but still have an innovative profile, in the hope of encouraging collective action. The legislation is intended to boost the size of this type of company, as they are granted many of the advantages that the Growth 2.0 Decree had previously introduced for innovative startups.



2.3.1 Main features

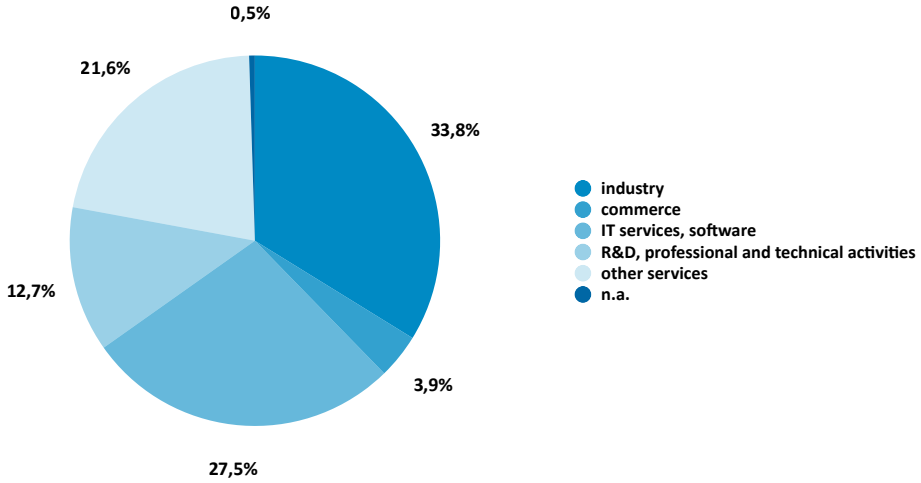
On 30 June 2016, there were 204 innovative SMEs listed in the special section.

The prevalent legal form is the limited liability company: almost 65.7% of innovative SMEs take this form; 27% opt for the "SpA" format.

61.8% of innovative SMEs provide services to businesses. The main activities relate to information and communication services: more than 27% of all innovative SMEs operate in the field of IT consulting and software production. Scientific research and development and professional and technical activities are

next (12.7%). Only 33.8% of innovative SMEs operate in manufacturing industry and construction; finally, Commerce accounts for 3.9% of the total (Figure 2.3.1).

Figure 2.3.1 Innovative SMEs in the main sectors of the economy[21]



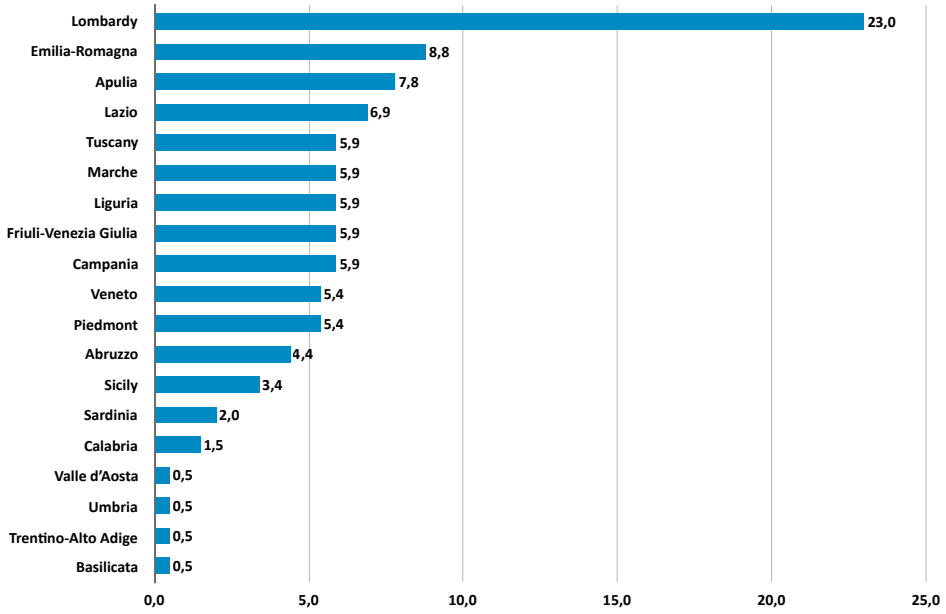
Source: Based on InfoCamere data

The South of Italy is home to 25.5% of the innovative startups, the Central regions have 19.1% and the North has 55.4% (34.8% North-West, 20.6% North-East).

Lombardy is the Italian region with the highest percentage of innovative SMEs (23%); this is followed by Emilia Romagna with 8.8%, Puglia with 7.8%,and Lazio with 6.9% (Figure 2.3.2).

21 La sezione speciale del Registro include una PMI innovativa in liquidazione, per la quale non è definito il settore economico di attività

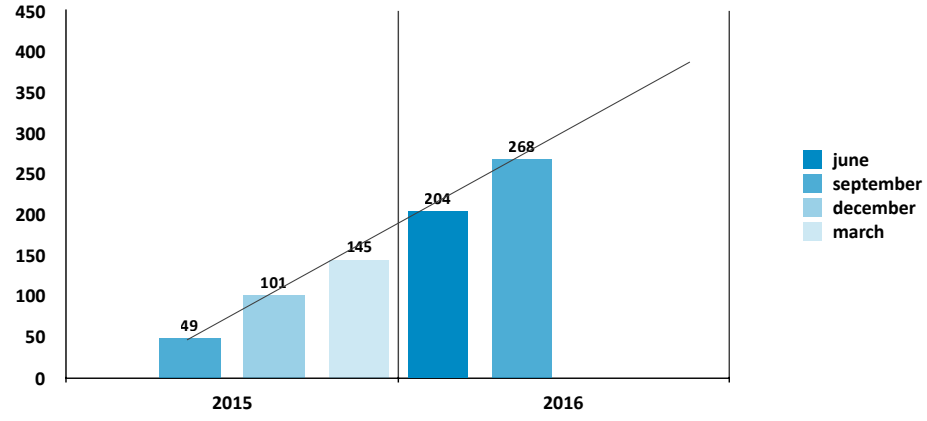
Figure 2.3.2 - Ranking of Italian regions by percentage of innovative startups compared to national total



Source: Based on InfoCamere data

As the definition of innovative SME does not incorporate any time limit on formation, this special section of the Register also includes companies that were formed many years ago. For example, one of the companies registered started trading in 1926, another in 1967, three in the 1970s and 10 in the 1980s: overall, 30 companies were incorporated before the Business Register even came into existence (19 February 1996). 30 of the companies were formed in the 1990s, with another 90 in the 2000s; the remaining 69 were registered from 2010 onwards.

Figure 2.3 3: Total number of innovative startups at the end of each quarter (September 2015 – June 2016)

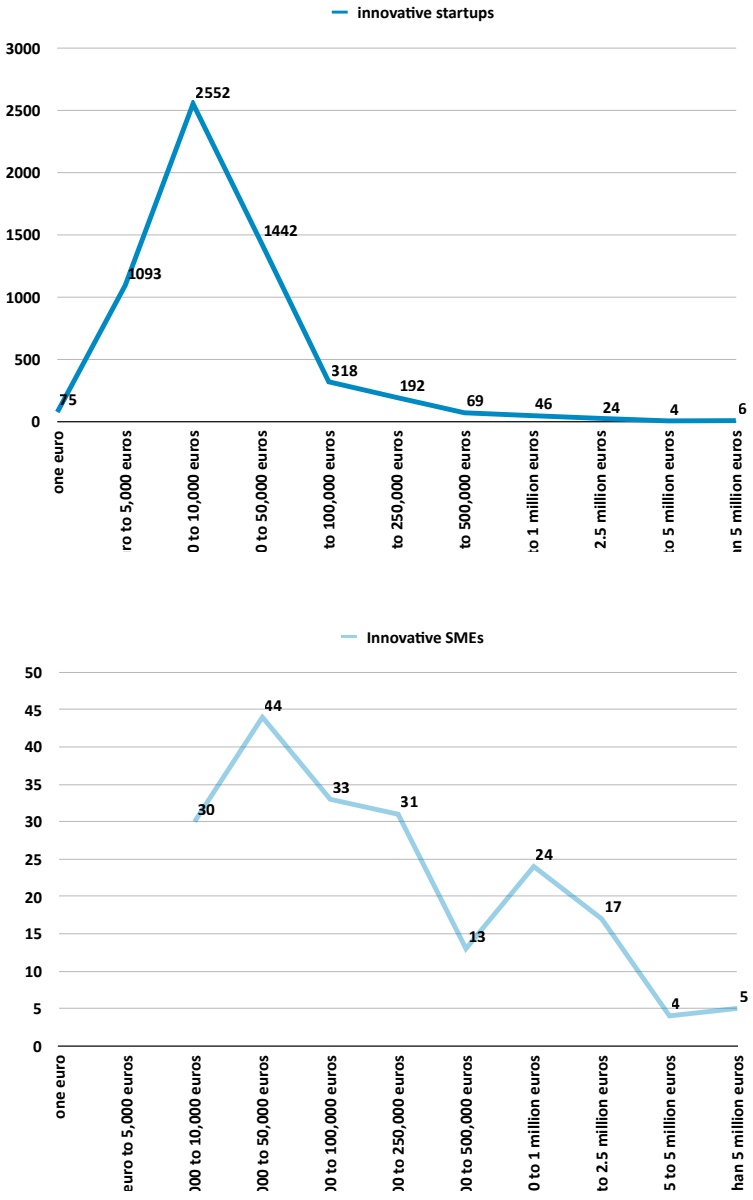


Source: Based on InfoCamere data

It can be seen that the growth in the number of innovative SME registrations is essentially linear. Continuing at the same rate, by June 2017 the number of innovative SMEs in Italy could more than double, reaching 400 units.

With regard to the distribution of innovative SMEs by class of share capital, there is a larger number of SMEs in the 10,000-€50,000 class. The figure below compares this distribution with that for innovative startups, the presence of which is significantly higher in the lower class (5-10,000 euro).

Figure 2.3 4: Innovative startups and innovative SMEs by class of share capital

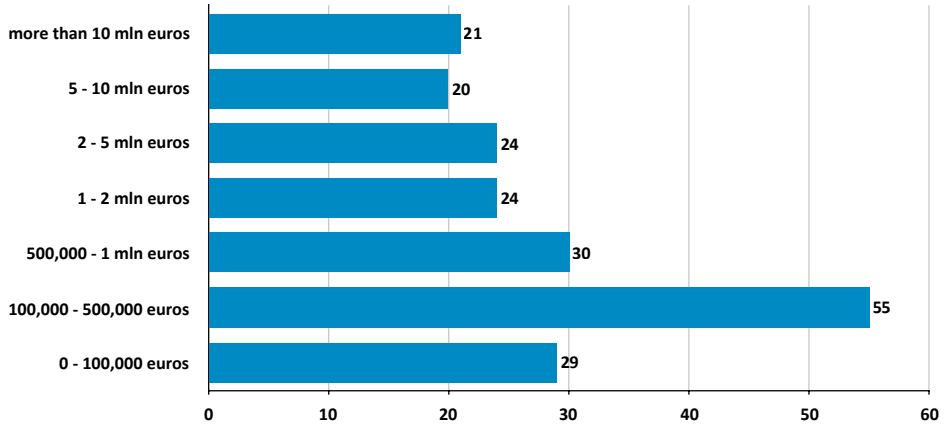


Source: Based on InfoCamere data

A crucial difference between the definitions of startup and innovative SME relates to the maximum value of production, which is 5 million for the former and 50 million for the second category (coinciding with the European definition of SME).

No fewer than 41 innovative SMEs (20%) recorded a value of production of more than €5 million. 21 of them exceeded 10 million, with a maximum of just over €30 million. It is also worth mentioning that 21 innovative SMEs have a value of production of less than €100,000 (nine do not exceed 10,000), while the other 54 do not go above €500,000.

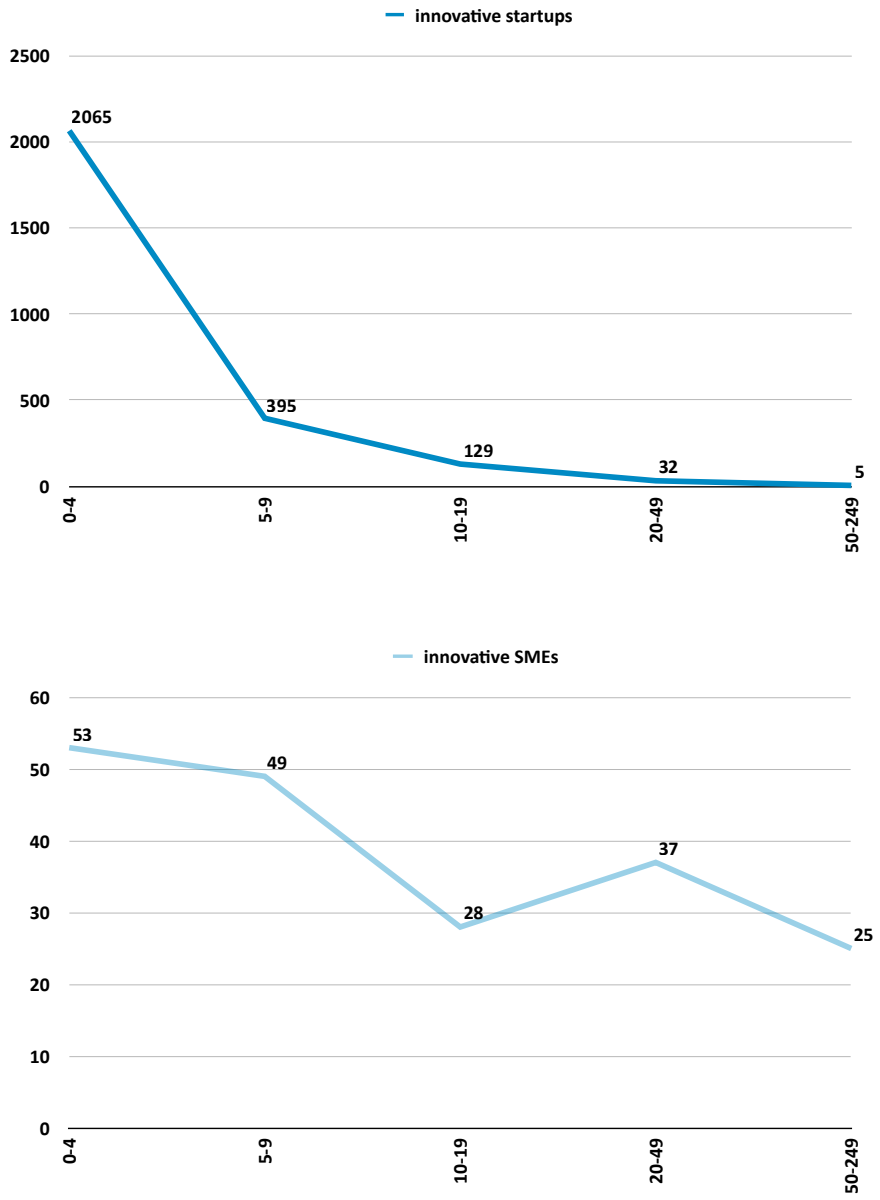
Figura 2.3.5: PMI innovative per valore della produzione



Fonte: elaborazioni su dati InfoCamere

Looking at the distribution of innovative SMEs by category of workforce, it can be seen that for innovative startups there are more SMEs within the 0-4 employees class; however unlike for the startups, the level of concentration is less marked. Unlike with the innovative startups, for which there is no maximum workforce level, as there is for turnover – a significant number of innovative SMEs have a workforce larger than 20 or 50.

Figure 2.3 6: Innovative startups and innovative SMEs by class of workforce



Source: Based on InfoCamere data

The largest innovative SMEs in terms of workforce are mainly found in the North (22 in the category of 20-49 staff, 17 in the category of 50-249).

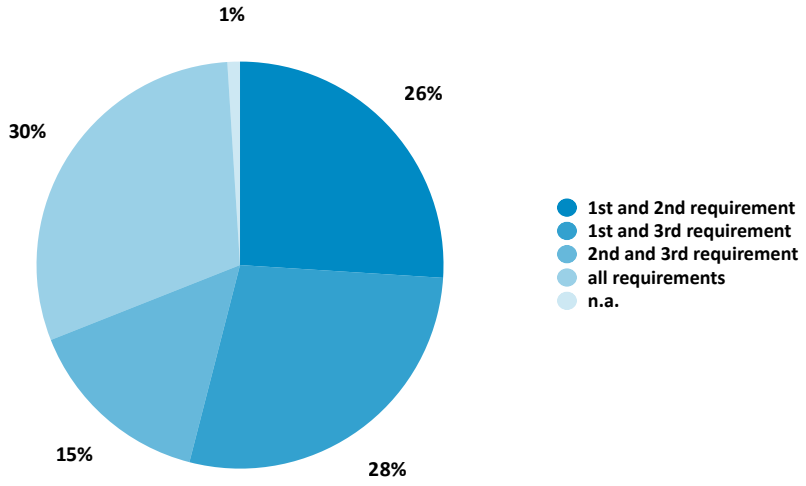
18 innovative SMEs have a mainly female shareholder base; three of them are made up exclusively of women. There are nine innovative SMEs with a majority of under 35's, of whom one is sole-owned; two of them are predominantly made up of foreign nationals.

Unlike with innovative startups, the innovative SMEs are required to declare that they meet not one but two innovation criteria. These criteria are weighted very differently from those applicable to innovative startups:

1. The volume of research, development and innovation expenditure must be at least 3% (not 15%) of the higher of the cost and total value of production;
2. At least one-fifth of the total workforce (and not one-third) must hold a PhD, be studying for a PhD or be a researcher; alternatively at least one-third of the total workforce (and not two-thirds) must have a full degree;
3. The intellectual property requirement is the same: the company must hold, or have deposited or hold a licence, for at least one industrial patented or hold the rights to an original program.

171 of the 204 innovative SMEs registered on 30 June 2016 said that they met the research and development expenditure criterion (84%); 145 the criterion for qualified staff (71%), and 149 in relation to industrial rights (73%). No fewer than 62 SMEs, the majority of the companies listed (30.4%), said that they met all three criteria; just over one-quarter confirmed the first and third (57) and the first and the second (52); there was a clear prevalence of companies that only met the criterion for R&D expenses, and therefore only a minority (30, i.e. 15%) confirmed just the other two criteria.

Figure 2.3 7: Alternative innovation criteria for innovative SMEs



Source: Based on InfoCamere data

2.3.2 Startups converted into innovative SMEs

Innovative SMEs extend many of the incentives reserved for innovative startups to a much broader category of company. In order to qualify as an innovative SME a company is not restricted by any limit on the date of formation: companies that have long exceeded the startup phase can also qualify for this incentive. Further, there is no maximum limit on the value of production of the beneficiary. The rules on innovative SMEs are therefore a natural evolution for innovative startups who are still clearly of an innovative nature even after five years' trading, or turnover of €5 million.

To facilitate the continuity between the two systems, innovative startups that have exceeded the time limits provided for in the Growth 2.0 Decree can access the special section reserved for innovative SMEs after confirming compliance with the criteria based on the simple, automatic conversion mechanism (Code 070 – "Startups: transfer to the special section") on the company form. This allows the company to apply for removal from the innovative startup section and simultaneously apply to be registered in the innovative SME section while maintaining the benefits of both systems without interruption.

49 companies have transferred from the innovative startups section to the innovative SMEs section: approximately one-quarter (24%) of the companies registered as of 30 June 2016. Of these, 38 were incorporated between 2009 and 2010: these are businesses that have exceeded the time limit permitted to benefit from the status of an innovative startup. Almost all of them remained in the special section for startups until the natural expiry of their right to remain there. As clarified in the Revenue Agency Circular 16/E (p. 14), that date was 18 December 2014 for companies formed prior to 19 October 2009, and 18 December 2015 for companies formed prior to 19 October 2010.

2.3.3 A potential still largely untapped

The still-limited awareness of the rules applicable to innovative SMEs is first of all due to the problems encountered in implementing some of the major benefits provided for in the decree law of 24 January 2015, known as the "Investment Compact", converted by law no. 33/2015.

The decree of the Ministry for Economic Development jointly with the Ministry for the Economy and Finance, which gave innovative SMEs the possibility of free, simplified access to the SME Guarantee Fund, was only issued on 23 March 2016.

Today, the interministerial decree implementing the tax breaks for investments in innovative SMEs has not yet been approved. This decree has been hampered by structural issues due to the changes introduced by the Investment Compact conversion law. This has outlined the problems in classifying innovative SMEs with fewer than seven years or more than seven years from the time of their first commercial sale, as each type has been associated to a different reference to European legislation on State aid. This already difficult situation is further complicated by the fact that the incentives for investments in innovative SMEs with more than seven years' history are subject to a case-by-case evaluation by a public-private committee called to decide on whether or not the company in question is innovative in its sector.

Other reasons that have reduced the number of registrations – which nevertheless peaked in May 2016 – are attributable to:

- Problems in companies seeing themselves as an "innovative SME". The definition is not linked to a well-defined concept, which is not the case for startups, now a socio-economic phenomenon that is well-established in the public consciousness;

- The obligation to certify financial statements, which has been lightened in the wake of various opinions (see par. 5.4) in which MISE simplified the requirements. In particular, with reference to companies that are not usually required to certify their financial statements, the interpretational solution suggested allows them to certify their accounts even after they have been filed at the time of first registration;
- Structural shortcomings in the communication of government incentives; often, information is not received by the companies it is targeted towards.

With reference to the second point, MISE considered that it has done everything possible to facilitate the application of the financial statements certification requirements, which is necessary if the relationship between the provider and the recipient of public aid is to be transparent. Trade associations, in their capacity as representatives of business interests and with a view to promoting the laws on innovative SMEs, can take action to encourage agreements with accountants' bodies in order to establish standard, special rate costs for financial statement certification, for the purposes of this scheme.

As to the shortcomings in communication, they are particularly significant if we consider that the policy on innovative SMEs is a series of self-selecting, non-automatic incentives. In other words they do not operate regardless of the company's own intentions, as would be the case with a reduction in the corporation tax rate, but can only be activated by the recipient company itself if they know of the existence of these rules, believe that they are worthwhile, and have been properly informed about how to apply. As can be seen in paragraph 3.4, the crisis of the "intermediates" – Chambers of Commerce and even more importantly, trade associations, in disseminating information about these incentives is clear: most companies rely almost exclusively on their accountants.

3

NOT EVERYTHING THAT COUNTS CAN BE COUNTED: #STARTUPSURVEY, ITALY'S FIRST STATISTICAL SURVEY ON INNOVATIVE STARTUPS

On 31 March 2016, with a mass mailing to all the innovative startups listed in the special section on 31 December 2015, the Italian National Institute for Statistics and MISE launched #StartupSurvey, the first national statistical survey of innovative startups.

#StartupSurvey came from the need to investigate certain aspects of innovative enterprise in Italy, which cannot be obtained from the Register data found in the previous chapter. While the wealth of information obtained over the three years in which the policy has been in force provides a snapshot of the quantitative aspect of the phenomenon: the number of startups launched, the personnel and shareholders involved, the value of production, the geographical and sector distribution and so on – this survey is intended to enhance the available data, from a qualitative viewpoint.

While the Register data is predominantly objective in nature, many of the questions raised in the survey were subjective: the founders were often asked to give their opinions about key issues such as the sources considered most appropriate to fund an innovative enterprise, or the perceived impact of individual incentives on the startup's activity.

By addressing the startups directly, MISE is seeking to raise the profile of the evidence-based policy-making adopted since the law was enacted by hunting for new information about hitherto unknown aspects of business startups in Italy.

On the survey end date, 27 May, 2,250 innovative startups had completed the questionnaire. This is just over 44% of the total and is a very significant percentage for a voluntary statistical survey. The result was achieved thanks to periodic reminders sent to the target company not only through certified email (the only default contact address available for all the companies) but also, where possible, via ordinary email and outbound telephone calls – a channel that proved to be extremely effective – as well as through the publication of articles in the specialised press.

Most of the companies interviewed were located in the north of Italy: 31.2% in the North West and 26.8% in the North East. The other areas of the country were also well represented: 22% were based in the South and 20% in the Centre. They were mainly service companies (79.6%): 29.7% produced software, 16.4% operated in Research, 6.9% in data processing and 5.3% in Commerce and tourism. 20.3% operated in industry (including construction), and of these 3.5% produce innovative machinery. Both the territorial distribution and the sector distribution of the respondents reflected the population of innovative startups as a whole. 60.2% of companies recorded a value of production of up to €100,000 in the last year, 30.1% between 100,000 and 500,000, with 9.6% generating more than €500,000. The interviewed startups had been formed prior to the entry into force of the Italian Startup Act (December 2012) in just 18% of cases.

The #StartupSurvey questionnaire a split into four sections, each of which is covered in a paragraph of this Annual Report:

1. **Human capital and social mobility** (par. 3.1): The questions explore the education, employment and family backgrounds of the startups' workforce. The aim is to obtain a better understanding of the actual founders of innovative startups, their backgrounds and the reasons for going into business, as well as the way in which their academic and linguistic training and past professional experience has influenced their decision to start a business;
2. **Growth funding** (par. 3.2): this section explores the structure of the shareholder body, and the strategies used to obtain finance. Particular attention has been paid to the propensity of entrepreneurs to obtain business finance through alternatives to the traditional form of bank credit, particularly, risk capital finance;
3. **Innovation** (par. 3.3): the questions in this section are intended to provide a better description of the innovation potential of the startup, and of the intellectual property tools and strategies that they used to bring their products or services to the market. An interesting area concerns the role of investment in research and development in the company's economy as a whole, particularly when these investments are made on behalf of other businesses or commissions from third parties such as universities and research institutes;
4. **Level of information and satisfaction with the policy** (par. 3.4): this section is intended to create a participatory process between the authorities and the beneficiaries. Entrepreneurs are asked to express their satisfaction with the policy measures: space has been left for suggestions and proposed improvements. Another aim of this section is to raise awareness of the opportunities offered by the regulations, by checking the entrepreneurs' knowledge of them and exploring which channels are most frequently used to obtain information.

A seguire vengono sintetizzate alcune delle principali evidenze emerse dall'indagine. Un rapporto dedicato, che raggiungerà un maggiore livello di approfondimento, verrà pubblicato a gennaio 2017.

3.1 HUMAN CAPITAL AND SOCIAL MOBILITY TRENDS

Profiles of the founders and types of jobs created in innovative startups

The first section of the questionnaire is intended to gather information about the founders of innovative startups, employed in operational and non-operational roles, and also about non-shareholders who provide solely a working contribution[22].

22 There are two types of personnel: permanent staff and "atypical" (non-permanent) staff. The information contained in section 1A of the questionnaire provides a brief overview of the composition by shareholder type (operational and non-operational) and of the different categories of permanent staff and atypical workers; section 1B consists of two parts. The first part explores the sociodemographic profiles of the operational shareholders and staff, while the second concentrates on various aspects that provide an understanding of the operational

The survey concentrates in particular on the professional background, education and family situation of those interviewed. Purely personal information is also given, such as the reasons that drove the founders to set up the company and the perceived impact on their income. Certain sociodemographic aspects of startup employees are also explored, even if the individual is employed on a non-standard contract.

Shareholders

The 2,250 startups registered were formed, as of 31 December 2015, of an average of four shareholders of whom 2.2 were "operational". 4.1% of startups have more than 10 shareholders in total while only 0.3% have more than 10 operational shareholders. On average, the innovative startups in the software processing sector have more shareholders (4.6); the difference in the average number is also seen regionally, with startups in Central regions appearing to be larger (4.7 shareholders, on average).

4363 operational shareholders provided information on their sociodemographic profile: their distribution in terms of age and gender can be seen in Table 3.1.a.

Table 3.1.a: Operational shareholders by gender and age

AGE GROUPS	WOMEN		MEN		TOTAL	
under 25	15	1.9%	55	1.5%	70	1.6%
25 – 34	216	27.1%	870	24.4%	1,086	24.9%
35-44	304	38.2%	1,249	35.0%	1,553	35.6%
45-64	244	30.7%	1,218	34.1%	1,462	33.5%
65 or older	17	2.1%	175	4.9%	192	4.4%
Total	**796**	**18.2%**	**3,567**	**81.8%**	**4,363**	**100%**

Source: MISE-Istat, May 2016

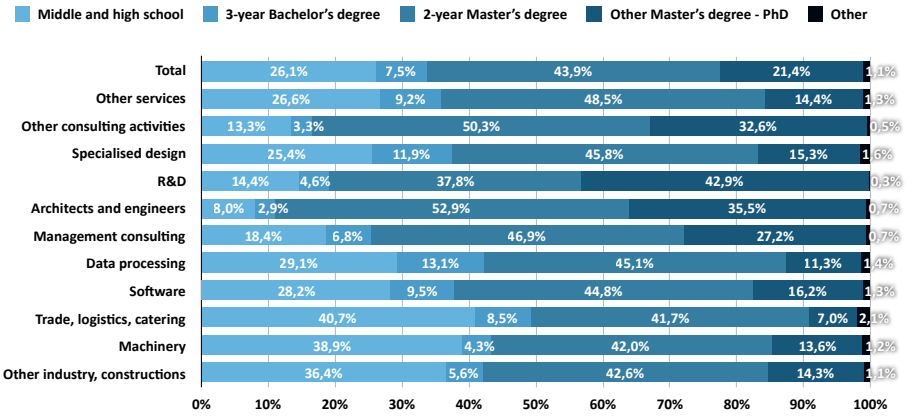
The typical shareholder has a fairly high average age (42) and is male in 82% of cases. Women account for only 18% overall and are, proportionately, younger: 29% of them are under 34 compared to 25.9% of men.

Another aspect in which women differ from men is the higher educational qualification: 78% of female founders have a degree compared to 72% of men, while 21% have a PhD, six percentage points higher than the figure for men.

shareholders' linguistic, academic and professional backgrounds, including any experiences abroad, as well as the family background. Among the personal information requested, the founders are asked to give their opinions on why they decided to become entrepreneurs, and on the perceived impact that starting the business has had, on their income.

Most operational shareholders have a technical or engineering background (41.7%), followed by an economic/managerial qualification (20.5%) or scientific (19.8%). Looking at the breakdown by sector (Figure 3.1.1), shareholders with a higher level of education (Master's degree/PhD) are found in greater numbers in research and development startups, while shareholders with lower qualifications are found in the more traditional sectors of industry and commerce.

Figure 3.1 1: Qualifications and sector of activity



Source: MISE-Istat, May 2016

More than 70% of the shareholders with a degree have chosen to work in a field related to their studies. This percentage reduces drastically among those with a lower qualification.

Approximately 90% of shareholders say that they have knowledge of at least one language other than Italian: primarily English, then French and Spanish. In many cases, their language knowledge is combined with academic qualifications and/or work experience gained internationally, for 55% of the shareholders.

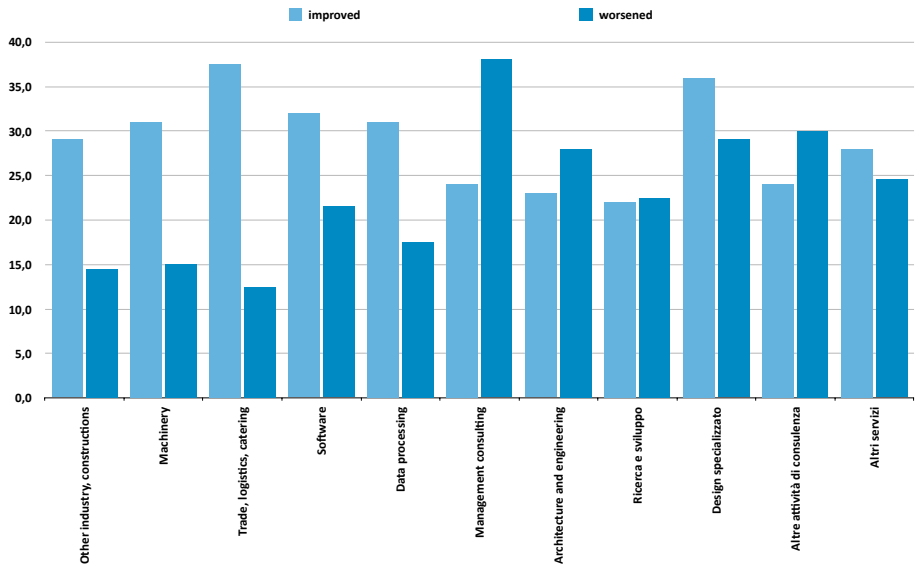
The vast majority of the founders (83.2%) have obtained prior work experience before starting their business. 34.7% worked for another company; 26.2% worked as a freelance professional, while 22.3% was a partner in another business. More than 50% of shareholders have decided to work in a field related to their previous job.

An analysis of the shareholders' family background shows that they come from a variety of contexts: in 30% of cases their father was employed as a manual or clerical worker, with 11% being public sector workers. In just 34.3% of cases, the business owner's father was an entrepreneur or freelancer, and this percentage falls to 12.5% in the case of the mother.

The main reason for starting a business, indicated by the founders, was the aim of producing innovative products or services (36% of replies); this was closely followed by the goal of building a successful, high profit business (29% of replies).

Half of the shareholders stated that their entrepreneurial venture had not yet have a significant impact on their income, while 29.4% of business owners complained of a decline in income. Startups launched in the field of commerce, transport, hotels and specialised design were finding things harder (respectively, 37.8% and 35.6% said their income had declined) while on the other hand, the sector in which the largest number of founders (more than 30%) declared an improvement in income was management consulting (Figure 3.1.2).

Figure 3.1 2: Deterioration/improvement in income



Source: MISE-Istat, May 2016

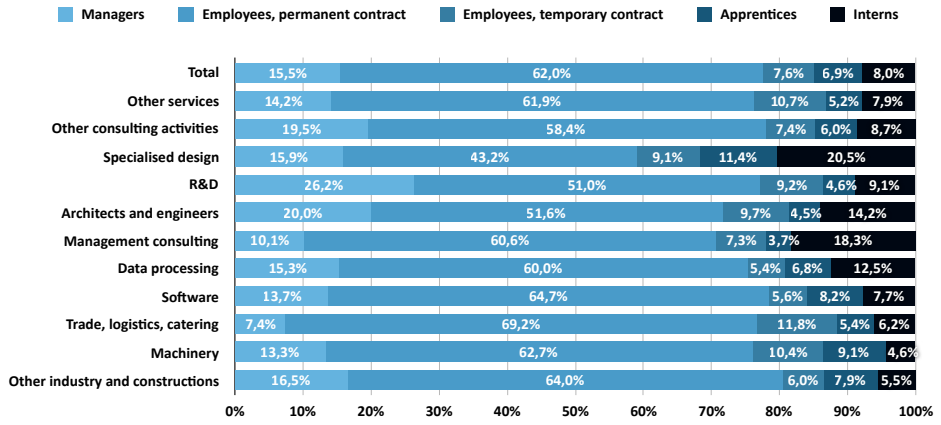
Employees

In terms of jobs, the startups as a whole employed 5,704 staff (average of 2.5 employees per business) with a total of 1,467 atypical personnel (less than 1, on average, per business)[23]. Just over half of the startups (59.4%) had hired staff, most of them clerical workers on permanent contracts (62%), while the managers accounted for 15.5%. 24.7% of staff and only 13% of managers were female.

Approximately one-quarter of the startups uses atypical personnel in the business (Figure 3.1.3). The most common figure in this category is the project worker (46% of the total), while the use of temporary staff is not common (just 2.7%). Women are also in the minority in this category, representing approximately 25% of the total.

23 "Employees" indicates anyone in employment (managers, clerical staff and manual staff on fixed term or open ended contracts, apprentices and trainees. Atypical personnel includes temporary workers, project workers, workers on secondment and other categories.

Figure 3.1 3. Breakdown of employee numbers by type of contract and sector



Source: MISE-Istat, May 2016

The startups created after the entry into force of the policy (82% of respondents) have a similar occupational structure, in terms of operational shareholders, compared to companies formed previously. The biggest difference is in the number of employees, which is significantly higher for those companies that were already in existence when the law came into force (4.5 employees compared to 2.1 companies founded after the law was introduced).

48% of staff are very young, aged between 25 and 34. Unlike the business owners, the most represented qualification is the upper middle school category (28%); overall however two-thirds of employees have gained at least one degree. Technological and engineering skills are the most sought-after among startups, accounting for 45.5% of all employees.

3.2 GROWTH FINANCING

The second section of the #StartupSurvey covers the fundamental issue of the funding sources used by the founders of innovative startups in Italy, during the startup and growth phase. Finance is a major factor at each stage of the startup's life-cycle but it can have decisive implications at the startup phase, when the business performs its shareholder body and draws up its bylaws. This section explores the capacity of the business owners of innovative enterprises to know their initial and future financial requirements, their ability to attract and mobilise financial resources and to evaluate the most appropriate source of finance from among those available.

At the time of formation, innovative startups mainly obtain funding from their shareholders: in 68.4% of cases the shareholders covered all the funds required for the startup, and in 74.2% of cases had a majority share. It is therefore important to look at the profile of the shareholder bodies, particularly the number of founders, to understand who is playing a decisive role in the set-up phase: the survey reveals that in 43% of cases, the company was formed by no more than two shareholders but in 10.1% of cases, by a single shareholder. The share of companies formed by more than five shareholders is significant (19.1%).

In 77.2% of cases, none of the founders had abandoned the shareholder body at the time of the survey. However, this figure is clearly influenced by the young age and early stages of development in which most of the interviewed companies found themselves: among the companies set up prior to the entry into force of the law (December 2012), no fewer than one out of three (33.3%) recorded the departure of at least one shareholder. A similar percentage was found for startups with turnover of more than €500,000 (32.3%). Just over 30% of the respondents had welcomed at least one new shareholder, a percentage that tended to rise, even above 40%, as the company became older, and as the value of production increased.

The companies started with financial resources other than those of their shareholders represent a minority, albeit fairly large: 11.8% of the respondents said that they have not resorted to personal funds.

The questionnaire referred to "Family, friends and fools", in other words donations from relatives and friends, national and local public finance, bank credit and venture capital, business angels and other companies, as possible sources of alternative finance.

The survey shows that at the time the company was founded none of the above-mentioned sources of finance had been used by more than 10% of the innovative startups that replied. Donations and national public finance were very low, at this stage: relatively speaking, regional and local public finance, funding for individuals (who, if present, often met all the financial requirements of the company) and bank credit were the channels used relatively more frequently (Table 3.2.a).

Tabella 3.2.a: Fonti finanziarie al momento della fondazione dell'impresa

Share %	Own funds	Donation from family, friends and fools	National public finance	Regional/local public finance	Equity investment by private individual*	Bank loan
0	11.8%	96.0%	97.2%	92.8%	92.4%	92.0%
1-25	7.1%	1.3%	0.4%	2.2%	1.7%	1.9%
26-50	7.0%	1.4%	0.9%	1.7%	1.2%	2.3%
51-75	2.6%	0.1%	1.2%	1.3%	0.8%	1.5%
76-99	3.2%	0.5%	0.3%	1.7%	1.2%	1.4%
100	68.4%	0.7%	0.1%	0.2%	2.8%	0.9%
TOTAL	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

** venture capital fund, business angel, company, other.*

Source: MISE-Istat, May 2016

With the passage of time, the share of companies resorting exclusively or mainly to their own funds tends to shrink, although remaining dominant (53.2% exclusively, 63.3% majority). Alternative sources that increase significantly are public finance, particularly in the South where almost 10% of the survey respondents had access to national funding (it is to be assumed, the two Smart&Start schemes).

The share of companies receiving equity investments from a private individual is still limited: almost 90% had not obtained anything. Companies formed some time ago with a higher value of production tended to receive larger amounts in terms of risk capital, which in this category represents a majority share of the funds used by around one business out of six.

Experience and value of production made even more difference when it comes to accessing bank credit, the source that more than any other seems to have impacted the trend in the sourcing of finance among innovative startups during the growth phase. 23.2% of companies have received a loan, and this percentage rises to 30.3% for those formed prior to the entry into force of the law, and to 46.3% for those with a value of production higher than €500,000 (Table 3.2.b).

Table 3.2.b: Current sources of finance

Share %	Own funds	Donation from family, friends and fools	National public finance	Regional/local public finance	Equity investment by private individual	Bank loan
0	16.4%	97.0%	94.8%	91.9%	89.5%	76.8%
1-25	10.4%	1.4%	1.6%	3.6%	1.8%	5.6%
26-50	9.9%	0.7%	2.0%	2.7%	2.0%	6.7%
51-75	5.0%	0.1%	1.1%	0.8%	1.3%	4.0%
76-99	5.1%	0.4%	0.4%	0.4%	2.1%	4.4%
100	53.2%	0.4%	0.2%	0.5%	3.3%	2.6%
TOTAL	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

** venture capital fund, business angel, company, other.*

Source: MISE-Istat, May 2016

44.2% of innovative Italian startups confirm they are partially satisfied with the coverage of their financial requirements. In 34.1% of cases, the current funding is perceived as fully sufficient, and this figure varies widely between the regions. The "highly satisfied" category accounts for 38.4%, and 29.4% in the South. 21.7% of all companies said that they had a severe lack of financial coverage.

The number of companies that are fully satisfied with their financial situation depends heavily on the value of production: 56% of those exceeding €500,000 said they were satisfied compared to just 28.8% of those with a turnover of less than €100,000.

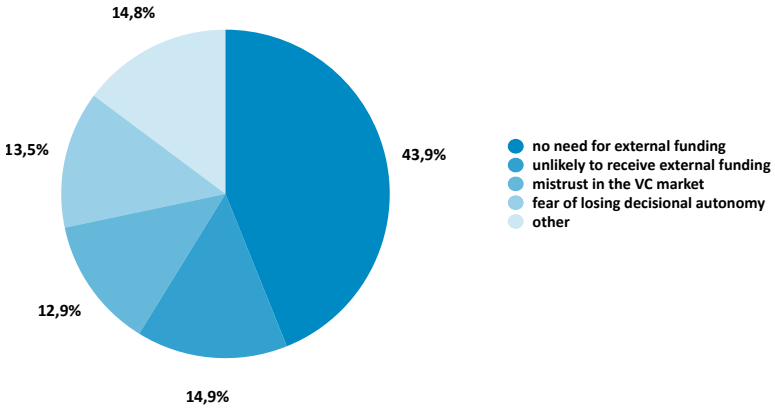
Many of the questions in this section of the questionnaire related to preferences, and the business owners' approach in sourcing various types of finance. The dichotomy between debt and equity finance, although as seen, it is still of little significance for the startups responding to the survey and has been investigated with particular care.

Overall, the companies consider that the optimal finance would come from the proper mix between equity and debt (65.7%): several categories were in favour of more equity (data processing and software), while the companies with a higher turnover, with easier access to credit, showed a clear preference for the second channel. Among the businesses that preferred investments in risk capital, there was an almost identical propensity towards venture capitalists/ business angels (42.9%) and "corporate venture capital", namely the acquisition of shares by other companies (42.8%). Only 14.3% of innovative startups would use an equity crowdfunding campaign.

Although many said they were interested, in practice it was rare for a startup to obtain its own risk capital: at the time of formation, 68.4% of the companies interviewed had not sought new finance from venture capital or business angels, nor launched equity crowdfunding campaigns. In general this happened because the business did not consider additional sources of finance necessary (43.9%); however it is important not to neglect other reasons such as a mistrust of the venture capital market and lack of confidence in obtaining finance through that means (12.9% and 14.9%) and a reduction in the decision-making powers of the founding shareholders (13.5%) (Figure 3.2.1).

Approximately 12% of innovative startups refused an offer of investment from an outsider, despite having received one. The reasons were varied: the offer was too low (24.9%), the contractual terms were too harsh for the business owners (22.4%) and there was over interference by the investor in the business, an issue that was mainly felt by the businesses incorporated more recently.

Figure 3.2 1: Reasons for not seeking new finance



Source: MISE-Istat, May 2016

The last aspect dealt with on the questionnaire was "alliances": formal cooperation agreements with other parties, primarily incubators but also universities and mature businesses. No less than 21.6% of the respondents said that at the time of the survey they were based at a business incubator/fast track centre, with another 5.8% having had such a base in the past. Cooperation agreements were entered into by no fewer than 45.6% of the companies: as we will see in par. 3.3 below, technological companies working with universities and research institutes, are prominent in this category.

3.3 INNOVATION STRATEGIES

The aim of the third section of the survey was to classify and write details about the innovation component of the startups. In a context in which, following the post-crisis recession, SMEs are attempting to make up the ground they have lost in their capacity to generate and avoid their technological innovation, it is particularly important to focus on an area in which the national production system has suffered from a historic deficit compared to the other mature economies: the exploitation of intellectual property and investments in R&D.

The questions in the survey primarily focused on the type and effects of the innovation found among the startups. The respondents stated that much of their innovation related to the product or service they offered (48%), while in 24% of cases it related to process innovation. The result of the innovation was in most cases a quantitative improvement (36.2%) or a diversification (27.1%) of the products or services already developed.

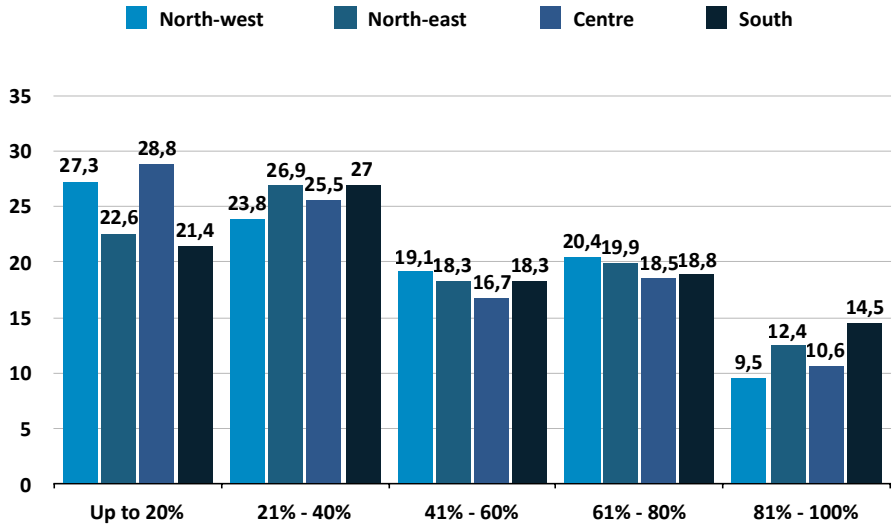
The information about the sources of knowledge that the companies used in their innovation strategies was also interesting: the vast majority of the founders (61.9%) stated that their knowledge came from their practical experience in the sector, with academic research playing a more limited role (19.4%). This figure appears to be consistent with the trend whereby own funds prevail among the sources of finance used in the startup phase (see the second section), further

reinforcing the representation of the typical founder outlined in the first section: mature, with various professional experiences in the past, often as a business owner. This figure is more commonly found than that of researcher or graduate in technical/scientific subjects who followed up their studies by converting their dissertation project into a company: this is proof that the transition from the academic world to the business environment is often interspersed with other experiences.

One of the alternative requirements for registration in the special section is the reaching of a qualifying R&D expenditure threshold equal to 15% of the higher of any costs or expenses. The percentage of R&D expenditure declared by startups participating in the survey was however often far higher than this threshold: the national average is 74.6% of the total expenses.

The majority of the innovative startups stated that they had invested less than 40% of all their costs in R&D but a significant share of them quoted far higher percentages. A discreet number of companies (11.5%) stated that their R&D expenses accounted for more than 80% of the total: this category includes a good number of startups from the South, despite the fact that overall, they appear to invest slightly less in R&D than their counterparts in other regions (Figure 3.3.1).

Figure 3.3 1: Ratio of R&D expenses compared to total expenses, by region



Source: MISE-Istat, May 2016

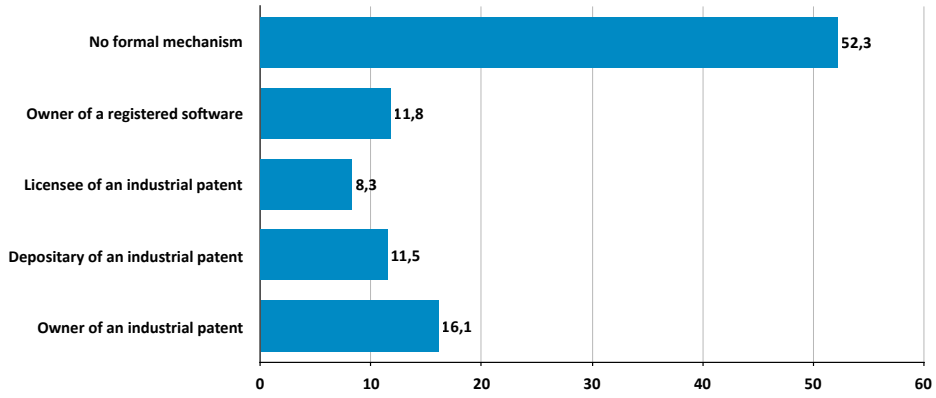
Most of these investments were made intra muros (45.5%), while the percentage of innovative startups that commissioned their R&D expenses exclusively from external public or private bodies (extra muros costs, 17.3%) was significantly lower; 36.2% paid both intra- and extra-muros costs. Intra muros expenditure was mainly for the benefit of the company: open innovation dynamics with other businesses (13.9%) and in particular the public administration (6.4%) played

a much smaller role. The extra muros R&D expenses were mainly supplied by other companies in the same sector as the acquiring business (33.6%) and in other sectors (35%), while partnerships with research centres and universities in particular were less frequent especially in the South.

While the sale and purchase of R&D operations is still limited to a minority of innovative startups, the picture is different when it comes to the market for products and services: innovative startups in Italy mainly address the B2B market, 30.7% mainly Italian companies and 17.8% mainly foreign companies. The market of Italian consumers (21.2%) and foreign (13.4%) holds a lower position; the public authorities are a significant source only for a minority of companies (12.2% Italian public authorities, 4.7% international public authorities), and this is mainly concentrated in the Centre and South.

An important contribution to the survey related to the protection of innovation through formal channels: the ownership of an industrial patent and other defence strategies such as secrecy and lead time[24]. The survey shows that the majority of respondents (52.3%) said that they have not adopted any formal mechanism to protect their innovation: only 16.1% of the respondents owned a patent, together with another 11.8% that owned registered software (Figure 3.3.2). However, this figure varies considerably depending on the sector of activity: one-third of startups producing machinery and half of those operating in the Commerce sector owned at least one industrial patent. More often (more than three innovative startups out of four) the company said that they had used informal means of protection: industrial secrecy was the most common, with 33.7% of replies.

Figure 3.3 2: Formal methods used to protect innovation



Source: MISE-Istat, May 2016

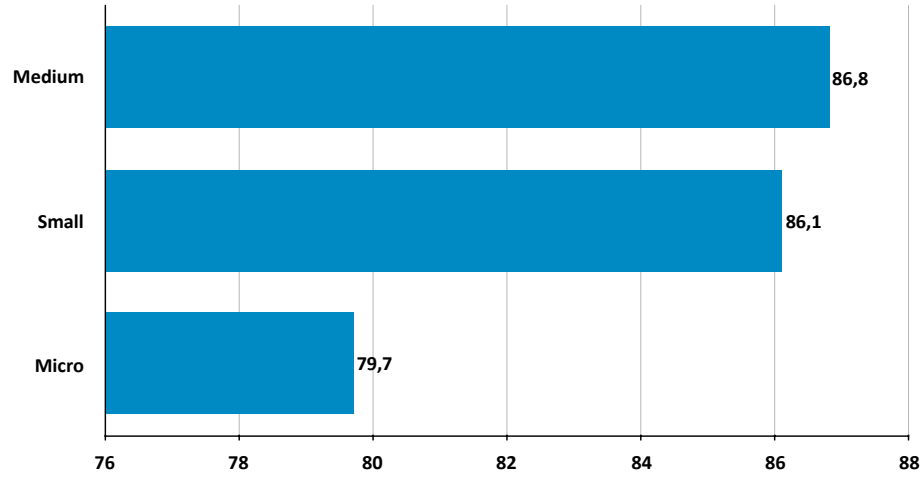
24 Lead time strategies are intended to exploit the learning curve before the competition, in order to consolidate leadership of the sector. They relate to the advantages, such as links with suppliers, that result from beating the competition to the market, and/or the company's ability to introduce innovation at a faster pace so that the competition does not have enough time to imitate the company's latest innovation.

Among the reasons that drive startups not to use protection strategies, almost the majority of business owners (48.4%) said they were convinced that the innovation of their company could not be appropriated in any way by a third party. On the other hand, a considerable number (25.5%) said that they did not know about the necessary strategies; this share was particularly high among startups in the Centre and South.

Compared to the picture painted up to now, various interesting differences can be seen among the companies, with particular regard to the category of turnover. The tendency to introduce process innovation seems to grow as production increases, with micro-startups (turnover of less than €100,000) being more oriented towards product innovation. There was also a strong positive correlation with the value of production with regard to the propensity to commission R&D services from the academic world. Assuming that the companies with a higher value of production are also mature businesses, it is not surprising that they appear to be more aware of the formal and strategic methods available to protect their innovations.

The founders of innovative micro-startups tend to draw to a greater extent from their academic knowledge, with almost one-third of them confirming that more than 60% of total costs were allocated to R&D expenditure. As evidence of a considerable level of diversification within the microscopic category, it is interesting to note that overall the average R&D expenditure shows a slight positive correlation with the growth in the value of production (see Figure 3.3.3), and the micro-startups are also those that commission more exclusively extra muros R&D services.

Figure 3.3 3: Ratio of R&D expenses compared to total expenses (percentages by company size)



Source: MISE-Istat, May 2016

3.4 LEVEL OF INFORMATION AND SATISFACTION WITH THE POLICY

The fourth and final section of the #StartupSurvey explores the relationship that innovative business owners have with the wide range of measures that go to make up the Italian Startup Act. Structured in four questions, of which one is an open answer, this section deals specifically with the concepts of "information" and "satisfaction" with the policy. With regard to the information aspect, the questions are intended to explore not only the parties' actual knowledge of the law – the survey mentions no fewer than 20 separate measures – but also the extent to which that knowledge has been developed, and through which channels it was acquired. Satisfaction with the policy was recorded both for those accessing the various incentives and for those who did not receive them: in this last case, satisfaction indicates the potential interest in the measures, while those who have already received the incentives were asked to give their opinion of the impact they have had on their business.

As can be seen from Table 3.4.b (end of paragraph), in terms of knowledge of the policy, leaving aside the reduction in startup costs to which all innovative startups have the automatic right (at least with reference to the exemption from the Chamber of Commerce taxes), the most commonly known measure is the simplified access to the SME Guarantee Fund. The SME Guarantee Fund is one of the measures that the startups most commonly use (18.4% of all the innovative businesses that reply), and the one they are most interested in using in the future (33.4%); a relatively high percentage (18.4%) confirmed that they knew about the measure but did not know how to apply for it.

Other measures that received considerable potential interest from startups include the R&D Tax Credit (38%), incentives for investors (36.1%) and flexibility in the hiring of new permanent staff (36%). The lesser-known measures are the tax credit on the hiring of qualified personnel (CIPAQ), which was valid for 2012-2014, the National Patent Box regulations and the ITA internationalisation services. Measures which are known but have relatively limited interest include equity crowdfunding and the possibility of introducing stock option and work for equity plans for staff.

Measuring policy satisfaction as a perception of the impact of individual measures by past recipients, various significant findings have been highlighted in Table 3.4.a. The measures perceived by the recipients as being most effective are the access to the SME Guarantee Fund (average evaluation 4.33 on a scale of 0-5), and the R&D tax credit (4.02). These incentives are particularly popular among innovative startups, which show significant appreciation both before using them and after having verified their impact.

However, 30% of the innovative startups have not received adequate information about these opportunities. The problem is even more acute with regard to other measures such as CIPAQ, which was phased out some time ago, and the stock option and work for equity plans which have low levels of awareness, interest and utilisation: however those who did take up these opportunities give positive evaluations of (more than 3.5/5).

Table 3.4.a: Average rating of incentives, scale of 0-5

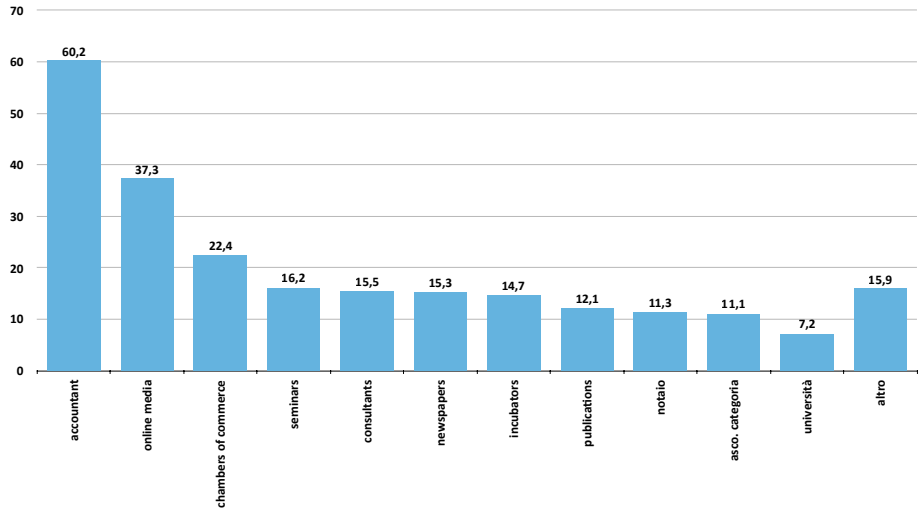
IMPACT OF MEASURES USED	AVERAGE RATING	NO.
Preferential access to the SME Guarantee Fund	4.33	*310*
R&D Tax Credit	4.02	*213*
CIPAQ 2012-2014	3.80	*117*
Incentives for investors	3.72	*311*
Stock options and work for equity	3.59	*80*
Facilitated rebalancing of losses	3.49	*224*
Facilitation in VAT set off	3.45	*261*
Flexibility in use of fixed term contracts	3.39	*170*
Smart&Start Italia	3.23	*124*
Patent Box	3.14	*58*
Dynamic salaries	3.13	*56*
Non-applicability of the rules governing shell companies	3.07	*126*
Flexible company regulations	3.06	*501*
Exemption from Chamber of Commerce costs	2.88	*1,433*
Reduced startup costs	2.84	*1,291*
Smart&Start	2.84	*183*
ICE internationalisation services	2.72	*97*

Source: MISE-Istat survey, May 2016

The survey highlighted that there are still serious shortcomings in the availability of information about these schemes. This makes it all the more important to know which channels are most commonly used by business owners to obtain information about the opportunities related to the new laws, so that future information campaigns can be planned.

The #StartupSurvey clearly reveals that the major source of information about the policy is the business accountant (Figure 3.4.1). More than 60% of the founders of innovative startups taking part in the survey confirmed that they were informed about the measures by their accountants. This is almost double the percentage compared to the second most important source of information, and online media (37.3%) which, in turn, are far ahead of the printed media. The Chambers of Commerce also play a significant role, while two channels that have not yet realise their potential are the trade associations, which are only significant for larger companies, and universities, which are of limited significance only for companies whose primary object is R&D.

Figure 3.4 1: Sources of policy information used by respondents, percentages



Source: MISE-Istat survey, May 2016

Section 4.4 of the #StartupSurvey also contained a free response question: "*In your view how could the legislator improve the regulatory framework for innovative startups? Which aspects of company life should the law cover?*" This field was completed by 1,044 respondents, leaving apart the "I don't knows" and insufficiently clear answers, 994 replies were classified. This corresponds to 44.2% of the 2,250 questionnaires received.

The responses are very different in terms of length and content: a few contain only a few words, while some are particularly complex and detailed. The topics covered in the answers also varied widely, although some appeared very frequently.

The replies were classified as follows:

- **Access to credit:** 213 replies, 21.4%
- **Tax and incentives:** 247 replies, 24.8%
- **Work and social contributions:** 210 replies, 21.1%
- **Funding schemes:** 190 replies, 19.1%
- **Equity and alternative finance:** 107 replies, 10.8%
- **Costs of bureaucracy:** 277 replies, 27.9%
- **Communication, training, networking and internationalisation:** 188 replies, 18.9%
- **Other measures:** 114 replies, 11.5%

Many startups submitted more than one proposal, or their proposals fell into multiple categories. The "Costs of bureaucracy" and "Tax and incentives" categories tended to appear together (68 cases) with the answers being in many cases generic and predictable (e.g. "Cut taxes and bureaucracy").

Some of the fields contained more specific policy indications: see the field "Funding schemes", which ranges from a request to run more "outright grants" schemes to a request to limit the use of cash -negative solutions, in other words procedures in which the finance is provided in the form of a reimbursement of costs already incurred. Many replies related to the first-hand experience of the respondent, for example with the SME Guarantee Fund, or with the Smart&Start Italia programme. The category "Equity and alternative finance", which is traditionally associated with the world of business startups, was not widely represented: on the other hand, the proposals in this area were often highly specific.

With regard to taxation, the cost of labour and the costs of bureaucracy, although most of the answers were generic, there were several more specific replies: for example the creation of an "no tax area" for the first few years of business, or exemption from payment of the minimal national insurance contributions the companies that have not yet recorded any sales, as well as the costs of the roles of intermediaries such as notaries and accountants, particularly during the startup phase. The replies show that the issue of fiscal obligations is particularly strongly felt by newer companies, while the more mature businesses are more concerned with the cost of labour.

Table 3.4.b: Level of knowledge of incentives, percentages

KNOWLEDGE OF, INTEREST AND USE OF THE FOLLOWING INCENTIVES	I KNOW ABOUT IT AND I HAVE USED IT	I KNOW ABOUT IT AND I INTEND TO USE IT	I KNOW ABOUT IT BUT I AM NOT INTERESTED IN IT	I KNOW ABOUT IT BUT DON'T KNOW HOW TO OBTAIN IT/I NEED TO GET INFORMATION	I DON'T KNOW
Reduced startup costs	63.4%	10.8%	6.4%	8.1%	12.1%
Flexible company regulations	25.1%	17.8%	20.7%	12.1%	24.7%
Incentives for investors	18.6%	36.1%	12.3%	15.6%	17.1%
Preferential access to the SME Guarantee Fund	18.4%	33.4%	16.0%	18.4%	13.9%
Facilitation in VAT set off	14.1%	31.1%	11.0%	15.3%	28.3%
R&D Tax Credit	12.2%	38.0%	8.8%	18.6%	22.5%
Facilitated rebalancing of losses	11.6%	24.0%	24.4%	15.0%	24.6%
Smart&Start Italia	10.7%	23.4%	24.9%	16.6%	23.2%
Flexibility in use of fixed term contracts	9.8%	36.0%	20.3%	15.7%	18.2%
Smart&Start	7.2%	16.2%	31.0%	13.4%	30.5%
CIPAQ 2012-2014	7.1%	25.7%	13.2%	14.2%	39.2%

KNOWLEDGE OF, INTEREST AND USE OF THE FOLLOWING INCENTIVES	I KNOW ABOUT IT AND I HAVE USED IT	I KNOW ABOUT IT AND I INTEND TO USE IT	I KNOW ABOUT IT BUT I AM NOT INTERESTED IN IT	I KNOW ABOUT IT BUT DON'T KNOW HOW TO OBTAIN IT/I NEED TO GET INFORMATION	I DON'T KNOW
Non-applicability of the rules governing shell companies	6.8%	11.5%	25.1%	9.8%	46.0%
ICE internationalisation services	5.9%	23.6%	21.0%	19.5%	29.3%
Stock options and work for equity	4.4%	28.2%	25.1%	18.9%	23.2%
Patent Box	3.5%	28.7%	15.4%	19.8%	32.1%
Dynamic salaries	3.5%	29.7%	16.8%	16.6%	32.6%
Equity crowdfunding	1.7%	26.8%	36.2%	18.0%	16.6%
Italia Startup Visa	1.0%	8.5%	27.4%	12.9%	48.8%
Italia Startup Hub	0.5%	8.3%	26.8%	12.9%	49.6%

Source: MISE-Istat survey, May 2016

4 GROWTH 2.0 DECREE AND OTHER MEASURES TO SUPPORT THE ITALIAN INNOVATIVE STARTUP ECOSYSTEM: MAIN FINDINGS ON PERFORMANCE UP TO 30 JUNE 2016

Not all the measures introduced by Decree Law 179/2012 for innovative startups enable a quantitative measurement of performance given the current status of the information sources and survey methods. The following analysis does not include the following tools:

- Non-application of the regulations on shell companies and loss-making companies;
- Facilitated rebalancing of losses;
- Raising the VAT credit threshold from 15,000 to €50,000, above which the conformity visa for horizontal set-off is obligatory;
- Flexibility in use of fixed term contracts;
- Possibility of paying staff and external collaborators with equity bonus plans, which are only taxed on capital gains;
- Exemption from the rules on insolvency, and application of the law on the management of fail-fast crisis management, to non-insolvent companies

With the exception of the above, all the other measures for innovative startups have produced quantitatively measurable data: the results of these findings are described in the paragraphs below. Unless indicated otherwise the reference date was 30 June 2016.

4.1 REDUCTION IN STARTUP COSTS AND NEW ONLINE INCORPORATION PROCEDURE

Once they are registered in the special section, innovative startups and certified incubators "*… are exempted from the payment of stamp duty and the administrative fees in accordance with obligations concerning registration in the register of companies, and as well as from payment of the annual fee due to the Chambers of Commerce*" (Article 26, section 8 of Decree-Law 179/2012.

In its Circular 16/E of 11 June 2014, the Revenue Agency clarified that the exemption from paying administration fees was meant in its broadest possible meaning; the exemption from paying the stamp duty relates to all actions taken by the startup and certified incubator even after registration on the Business Register.

These regulations specify that this exemption is "*dependent on the maintenance of the requirements provided by law for the acquisition of innovative startup or certified incubator status, and lasts until the fifth year of registration at the most*". The loss of the requirements for innovative startup or certified incubator status involves automatic deletion from the special section and, therefore, the obligation to pay the stamp duty and administration fees "*while remaining registered in the ordinary section of the Register of Companies*".

The above advantages translate into significant savings for companies in the startup phase. Based on the estimates given in the previous edition of this Annual Report (section 3.1, page 78) and considering the average size of an innovative startup and the average number of documents filed each year with the Chamber of Commerce, these savings can be quantified at €525 per company for the first year of registration, and €435 during the four subsequent years.

As described in paragraph 1.6, from 20 July 2016, the founders of s.r.l's can use the new online incorporation procedure through which a standard memorandum of incorporation and digitally signed bylaws can be filled out and sent to the local Chamber of Commerce, on the Internet. This procedure can also be used without the assistance of a private consultant, thus eliminating intermediation fees. Alternatively, an s.r.l. can still be set up through a notarial public deed.

Based on a survey of 2.5% of the bylaws of the s.r.l. companies listed in the special section as of 30 June 2016, MISE estimates that a business owner choosing to form an innovative startup online can save up to €2,000. The average expenditure for each new formation (€2,011 nationally) varies significantly depending on the region: in general the costs are higher in the North West (on average €2,176), in line with the national average in the North East (€2,009) and lower in the South (€1,964) and particularly in Central Italy where the average cost is €1,810. As the amount of the fee varies depending on the complexity of the company formation and, all things being equal, includes a discretionary component from the professional consultant, the variation among the regions is significant, with a minimum of just over €1,000 and a maximum of €3,000 or more.

Data on the new online incorporation procedure

As of 30 September 2016, 57 innovative startups formed as an s.r.l. used the new digital signature and online formation procedure. Of these, 23 are still at the registration stage: 34 new companies have been officially incorporated.

Three companies chose to use the new procedure at the offices of the Chamber of Commerce in their province, with the assistance of the Business Register clerk. In this case, registration in the special section takes place at the same time as registration on the Business Register.

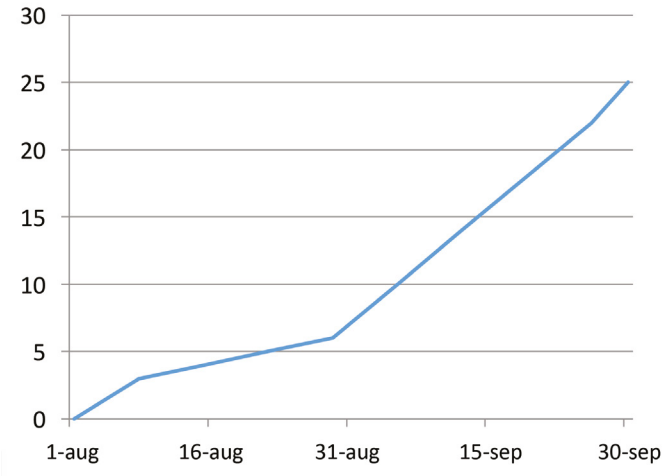
The other 31 used the new online procedure independently.

Not all of them have been officially recognised as innovative startups: Nine of them have been temporarily registered on the Business Register, pending verification of the requirements for registration in the special section.

25 innovative startups are now trading and were incorporated fully online by the founders, also with the specialised remote assistance provided by the Chamber of Commerce. Seven are located in Lombardy, five in Tuscany, three in the Marches and another three in Veneto, two in Puglia; another five regions (two in the South) have one innovative startup apiece. Three provinces: Milan, Ascoli Piceno and Venice have two companies registered with the new procedure; the others are distributed among 19 different Chambers of Commerce.

The weekly trend in registrations in the special section can be seen in the table below. 7 companies were registered in August, the other 18 in September.

Figure 4.1 1: Trend in new online formations



Looking at the initial subscribed capital, six startups fall into the class of between €1 and €5,000, 10 between 5,000 and 10,000, eight between 10,000 and 50,000 and 1 between 50,000 and 100,000.

16 of the newly-formed companies operate in the services sector, with 8 in software production (Ateco J 62). Of the 7 operating in the manufacturing sector, 4 have the Ateco code C 26 (manufacture of computers and electronics).

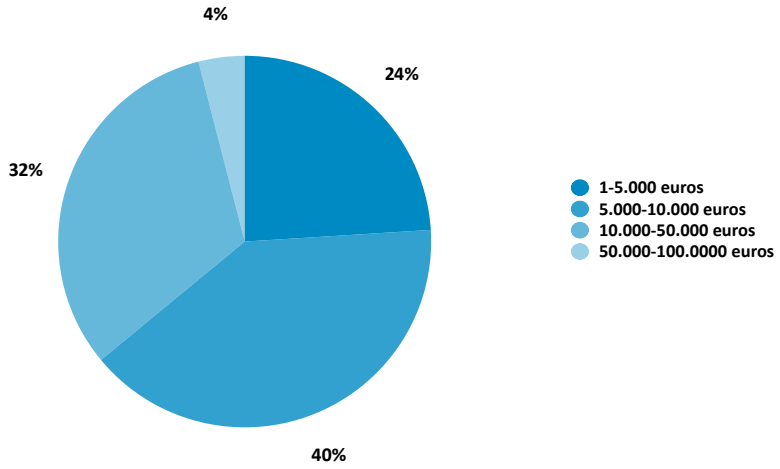
The majority (14) of innovative startups formed through the new procedure indicate, as the innovation criterion, the qualifying threshold for R&D expenditure. 10 selected the criterion relating to the academic qualifications of the business team, with only one relating to intellectual property.

Table 4.1.a, Figure 4.1.2: Regional distribution of innovative startups registered with the new method

REGION	NUMBER
Lombardy	7
Tuscany	5
Marche	3
Veneto	3
Puglia	2
Abruzzo	1
Emilia Romagna	1
Liguria	1
Piedmont	1
Sicily	1
Total	**25**

Source: InfoCamere

SUBSCRIBED CAPITAL



Source: Based on InfoCamere data

Specialised assistance from the Chamber of Commerce network: initial findings

The specialised assistance from the Chamber of Commerce network, which has been operational since the online platform was set up in July 2016 represents real added value for a business owner looking to form a startup through this new procedure.

Provided free of charge by the Chamber of Commerce network, the service was

designed to provide temporary assistance for the initial phase of the new online procedure. In view of the significant number of users that have been satisfied with the service (160, as of 30 September), the availability was initially extended until 9 November and then until 13 December 2016.

The specialised service provides new companies with step-by-step assistance in setting up the innovative company, using the new procedure. Specifically, the service will check that the form is accurate and that it meets the legal standards, and will verify the attached documents and other information provided. The case is then sent to the Business Register of the Chamber of Commerce.

After completing the form and before proceeding with fiscal registration, the user can request assistance using the relevant button on the web platform.

If the checks are successful, and after any corrections or additional information have been provided, the service will provide the user with a pre-compiled standard form (the application will be completed with the forms required for the Business Register and the Revenue Agency). The user can then quickly complete the fiscal registration of the form followed by the digital signature and transmission of the case to the Business Register, for inclusion in the ordinary and special sections.

This specialised service enables business founders to comply fully with the legal and formal standards required for company formation. This filter also allows the Chamber of Commerce to complete the subsequent checks more quickly, and makes the registration on the Business Register more immediate.

When registering the form with the Revenue Agency the new business owner can be sure that the documents are formally accurate, and that no further amendments will be required.

The user can contact the Chamber of Commerce at any time to obtain information or assistance with the formation procedure.

4.2 TAX CREDIT FOR HIRING HIGHLY QUALIFIED STAFF

The tax credit for the hiring of highly qualified staff ("CIPAQ") is a tax incentive equivalent to 35% of the cost incurred by a company the hiring of staff with a PhD, or full degree in technical/scientific disciplines, if employed in basic research, industrial research or experimental development. The incentive covers the costs incurred during the first year of the employment contract and can be extended up to a maximum of €200,000 per company ("de minimis" rules)[25]. Introduced by Article 24 of the Decree Law 83/2012 "Urgent measures for national growth", and governed by the decree of the Ministry for Economic Development, jointly with the Ministry for the Economy and Finance, of 23 October 2013, CIPAQ covers the years 2012, 2013 and 2014.

25 Regulation (EU) No. 1407/2013 of the European Commission provides for a maximum of €200,000 per company, over a three-year period.

The incentive applies to all recipients of business income, and applies also to permanent contracts converted from fixed term contracts. The total payroll costs incurred by the company are considered for the purposes of calculating the incentive: gross pay before tax, mandatory contributions and allowances for children and family members. Use of the incentive is subject to certain restrictions: the incentivised contract must be maintained for at least two years and, within the same period of time, the total number of people employed by the officially company cannot decrease or remain the same, but must increase.

In addition to a general financial provision, CIPAQ also allows for a specific 2 million Euro reserve to innovative startups and certified incubators for appointing staff as provided for by Article 27a of decree law 179/2012. Innovative startups and certified incubators may also benefit from the general measures.

Startups and incubators can also apply for the incentive with regard to the cost incurred for permanent contracts through apprenticeship contracts. These companies can also apply with a simplified procedure, and their applications are dealt with on a priority basis.

The applications are submitted through the dedicated website: information about how to use the site, and a question sheet, can be obtained from the MISE website.

Since 12 January 2015, applications for staff appointed between 1 January and 31 December 2013 can also be submitted online, while applications for qualified personnel appointed between 1 January and 31 December 2014 were accepted from 11 January 2016. The figures for 2014, the last year of operation of the measure, will be available for publication from the first few months of 2017.

For staff appointed during 2013, after a preliminary sorting which excluded 9 companies from the incentive, MISE granted credit to 43 innovative startups, and reported the information to the Revenue Agency (23 were located in the North, 13 in Central Italy and seven in the south). During that period, the companies hired 77 highly qualified personnel on a permanent basis: on average, 1.8 per company. The total credit applied for amounted to €921,000, approximately 21,400 per company and just under €12,000 per employee. The average cost incurred by the beneficiary companies for each employee hired during 2013 was €34,194.

65 people employed through CIPAQ (84%) are men, 12 women. The average age of the beneficiaries was 32.7: the youngest was 24 years old on the date of hiring, the oldest 67. Most of the beneficiaries (54%) were aged 30 or under. Almost all the beneficiaries had a technical degree: 54 of them had engineering degrees (26 with a specialisation in IT engineering, 19 in electronic engineering).

Table 4.2.a: Tax credit for highly qualified personnel granted to innovative startups for staff appointed in 2013

REGION	NO. OF COMPANIES	NO. OF EMPLOYEES	TOTAL CREDIT
North-West	14	21	296,317 €
North-East	9	15	168,169 €
Centre	13	22	306,078 €
South	7	19	150,926 €
Italy	43	77	921,490 €

Source: Our calculations using MISE data

As can be seen in the previous edition of the Annual Report (see par. 3.2, page 79), in 2015 MISE granted credit for staff appointed between 26 June and 31 December 2012 in favour of 12 startups (eight in the North, three in Central Italy and one in the south). These companies hired 17 highly qualified employees on permanent contracts, applying for credit totalling €160,000 (about €13,300 per company). During the first year of full operation of the measure, its use has increased significantly.

4.3 FREE, DIRECT ACCESS TO THE SME GUARANTEE FUND

The Growth 2.0 Decree provided free, simplified, direct access for innovative startups and certified incubators to the SME Guarantee Fund (FGPMI), a government fund that facilitates access to credit by granting guarantees on bank loans. This provision was implemented in the Decree of MISE of 22 February 2013. The provisions are illustrated in brief in a dedicated guide produced by the Ministry.

Specifically, the guarantee covers up to 80% of a loan provided by a bank to an innovative startup or certified incubator up to a maximum guaranteed sum of €2.5 million. It is granted on the basis of extremely simplified criteria, with a prioritised application channel. MedioCredito Centrale, the Fund's managing body, does not carry out any additional due diligence other than that done by the bank, and the applications for guarantees for innovative startups are prioritised and fast tracked.

Unless otherwise indicated, the data given below includes all the funding operations approved by the SME Guarantee Fund for innovative startups and certified incubators, including those that did not actually go through. Tables 4.3.b and 4.3.c provide additional information, showing the progress of the operations at the time of the survey.

Innovative startups

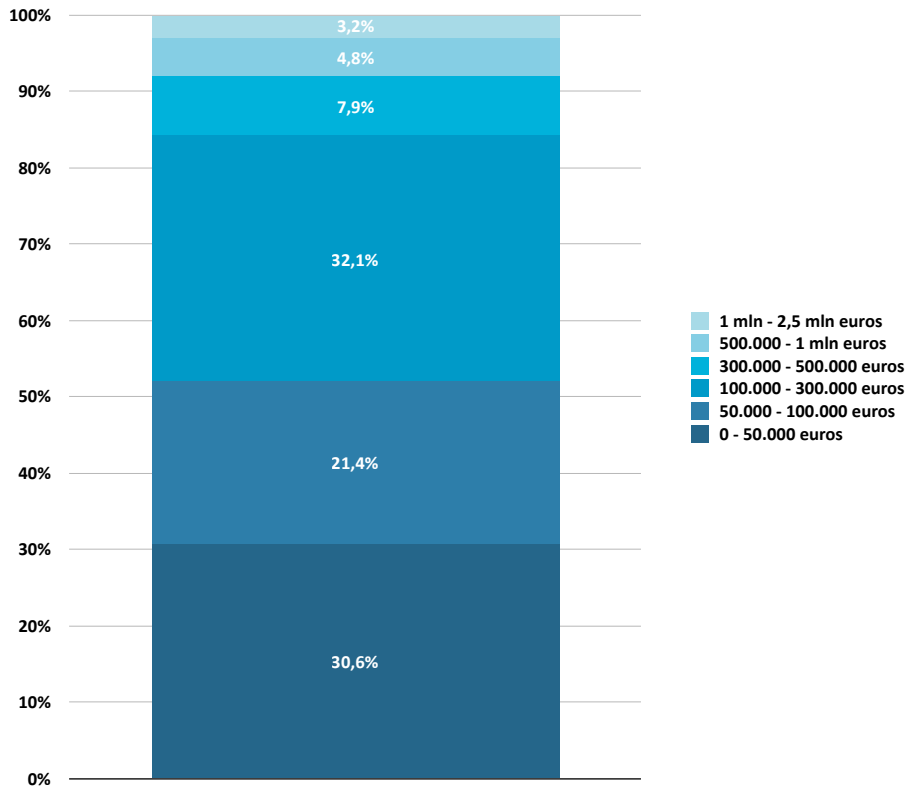
On 30 June 2016, just under three years after the first operation with innovative startups (September 2013), 1,050 companies listed in the special section had applied for special rate finance from the FGPMI. As some of the startups requested more than one loan, the total number of guarantee applications was 1,653. 426 were intended to cover short-term bank loans[26]. The number of startups whose guarantees were approved has more than doubled compared to 30 June 2015, when there were 461 (+128%); the increase is as much as 250% if we look at the number of approved transactions (660 as of 30 June 2015).

Given the sharp growth in this measure, the total sum of guaranteed finance requested by innovative startups has increased significantly, from 197 million recorded in mid-2015 up to approximately €417 million (of which 47 million was short-term) by mid-2016. Consequently the sum covered by the Fund amounted to €327 million, 78% of the amount requested from the lending bank (short term: €36 million). The average sum loaned was just under €253,000 – €33,000 less than the amount recorded in 2015, with an average duration of 54.2 months.

Figure 4.3.1 shows the distribution of the guarantees requested from the Fund, separated by size class. Just over half the guarantees (52%) did not exceed €100,000; in particular, 30.6% did not exceed €50,000. Most of the requested guarantee (32.1%) were between 100,000 and €300,000; the remaining 16% related to even more ambitious operations, of more than €300,000. Five innovative startups requested a guarantee of €2.5 million, the maximum permitted.

26 Short-term bank loans are those with a contractual expiry date of no longer than 18 months.

Figure 4.3.1: distribution by class of amount of guarantee requested from the FGPMI by innovative startups since the start of the Fund – data updated to 30 June 2016



Source: Our calculations using MedioCredito Centrale data

The FGPMI can intervene in the form of a direct guarantee, or as a counter guarantee. The counterguarantee is, relatively speaking, less used than it was in 2015, also against a context in which there has been a general reduction in the use of guarantee funds. On 30 June 2016, 13% of the operations (216) were counter guarantees compared to the 16% recorded on 30 June 2015; of those, 116 were recorded between 1 July of the last year and 30 June of the current year. 25% of all the counter guarantees were granted in Tuscany, the only region in which access to the Fund is only permitted in this format. Therefore 87% of the total national operations took the form of a direct guarantee.

The regional breakdown of the financing operations approved by the FGPMI can be seen in Table 4.3.a below. The first six regions in terms of the amount of finance also hold the first six positions in terms of the number of operations. Looking at the average values, notable cases are those of Lombardy, which despite having extremely high number of applications, is also in the top positions in terms of the average amount of the loan; Abruzzo, where the average amount of the loan is by far the highest, nationally, despite having median values (12th place out of 20) in the regional classification by number of operations; another highlight is Tuscany, which although placed in the middle of the classification by transactions

(11th place) for the reasons already mentioned has a very low average finance amount compared to the national average, ahead only of Molise, Sardinia and Valle d'Aosta.

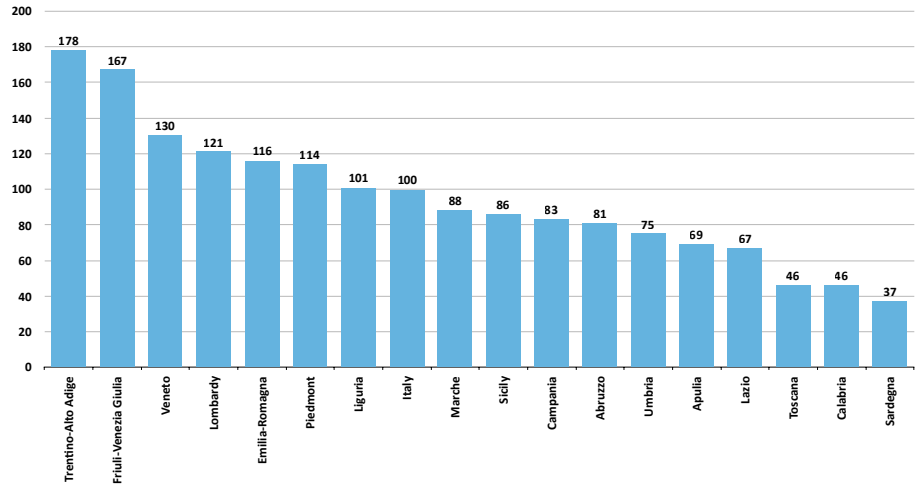
Table 4.3.a: Regional breakdown of finance operations

REGION	TOTAL AMOUNT (A)	# (A)	OPERATIONS (B)	# (B)	AVERAGE (B:A)	# (B:A)
Lombardy	157,402,154	*1*	430	*1*	366,052	*4*
Emilia Romagna	46,853,938	*2*	204	*2*	229,676	*8*
Veneto	38,914,646	*3*	184	*3*	211,493	*9*
Piedmont	21,046,348	*4*	123	*4*	171,109	*16*
Lazio	20,801,583	*5*	112	*5*	185,728	*12*
Friuli Venezia Giulia	17,506,640	*6*	92	*6*	190,290	*11*
Abruzzo	17,356,000	*7*	31	*12*	559,871	*1*
Campania	15,909,470	*8*	91	*7*	174,829	*13*
Sicily	15,553,860	*9*	59	*10*	263,625	*6*
Trentino Alto Adige	15,363,000	*10*	88	*8*	174,580	*14*
Marche	13,795,725	*11*	66	*9*	209,026	*10*
Tuscany	8,756,180	*12*	55	*11*	159,203	*17*
Puglia	8,523,000	*13*	31	*12*	274,935	*5*
Umbria	7,660,500	*14*	19	*15*	403,184	*2*
Liguria	6,585,000	*15*	28	*14*	235,179	*7*
Calabria	2,790,590	*16*	16	*16*	174,412	*15*
Sardinia	1,726,400	*17*	13	*17*	132,800	*19*
Molise	825,000	*18*	6	*18*	137,500	*18*
Basilicata	400,000	*19*	1	*20*	400,000	*3*
Valle D'Aosta	220,202	*20*	4	*19*	55,051	*20*
Grand total	**417,990,236**		**1,653**		**252,868**	

Source: Our calculations using MedioCredito Centrale data

As can be seen in Figure 4.3.2, the innovative startups based in Trentino Alto Adige and Friuli Venezia Giulia have significantly higher numbers of applications to the Guarantee Fund compared to the national average: this means that a relatively high percentage of the total innovative startups in those regions access to credit via the Fund. Conversely, a smaller fraction of companies took advantage of the incentive in Sardinia, Calabria and Tuscany: again, this is despite Tuscany having a significant number of innovative startups.

Figure 4.3 2: Capacity of innovative startups to access the FGPMI (Index Italy=100)[27]



Source: Our calculations using InfoCamere and MedioCredito Centrale data

As shown in Table 4.3.b, which shows the progress, as of 30 June 2016, of all of the finance operations approved by the FGPMI, 67.5% were repaid regularly while 4.5% expired without the guarantee having been called on. In 10.7% of cases, the FGPMI has approved the coverage of the loan requested, but the operation has not yet been completed and therefore the loan has not been dispersed yet. In 16.9% of cases, the operation was not completed. For just 0.3% of the operations, the guarantee was called on: these were cases in which the recipient company turned out to be insolvent.

Table 4.3.b: FGPMI operations for innovative startups

STATUS OF OPERATIONS	TRANSACTIONS	% OF TOTAL	AMOUNT FINANCED	% OF TOTAL	AMOUNT GUARANTEED	% OF TOTAL
Expired without guarantee being called on	**75**	**4.5%**	**7,977,000.00**	1.9%	6,129,200.00	1.9%
Regular repayments	**1,116**	**67.5%**	**239,118,348.62**	57.2%	186,658,503.97	57.1%
To be completed	**177**	**10.7%**	**48,481,960.00**	11.6%	38,307,968.00	11.7%

27 This does not include Molise, Basilicata and Valle D'Aosta, the three regions in which fewer than 10 applications were made to the Fund.

STATUS OF OPERATIONS	TRANSACTIONS	% OF TOTAL	AMOUNT FINANCED	% OF TOTAL	AMOUNT GUARANTEED	% OF TOTAL
Not yet completed	**280**	**16.9%**	**120,627,927.41**	28.9%	94,498,961.71	28.9%
Guarantee called upon	**5**	**0.3%**	**1,785,000.00**	0.4%	1,422,400.00	0.4%
Total	**1,653**	**100%**	**417,990,236.03**	**100%**	**327,017,033.68**	**100%**

Source: Our calculations using MedioCredito Centrale data

The non-performing rate identified among innovative startups (Table 4.3.c) is considerably lower than the one recorded among startups generally (in other words companies incorporated no more than three years ago) and among the population of joint-stock companies.

However, it should be said that this is still partial, for two reasons:

1. The lack of adequate history, as the FGPMI has only very recently started operations for innovative startups (just under three years, at the time of the survey);
2. The average time the transition to non-performing status, as recorded by the FGPMI during its history, is 3.5 years.

Table 4.3.c: Non-performing rate[28]

	TRANSACTIONS	AMOUNT FINANCED	AMOUNT GUARANTEED
Innovative startups	0.3%	0.4%	0.4%
Total startups (Companies trading for no more than three years)	9,2%	12,6%	10,0%
FGPMI total (joint-stock companies)	6.0%	7.1%	5.3%

Source: Our calculations using MedioCredito Centrale data

Certified incubators

On 30 June 2016, six certified incubators had applied to the Guarantee Fund, requesting finance of around €11 million (of which €130,000 for the short term), for

28 The non-performing rate is the ratio between the number of transactions moved to non-performing status and the total transactions accepted during the observation period. Only the joint-stock companies were taken into account for the purposes of this analysis.

a sum guaranteed of just over €8 million. The average term of the loans facilitated by the FGPMI is 55.6 months.

Compared to the total number of operations financed by the FGPMI 91.7% of the loans are regularly repaid. There was one loan that was not completed. Finally, there have been no records of guarantees being called upon.

Table 4.3.d: FGPMI operations for certified incubators

STATUS OF OPERATIONS	TRANSACTIONS	% OF TOTAL	AMOUNT FINANCED	% OF TOTAL	AMOUNT GUARANTEED	% OF TOTAL
Expired without guarantee being called on	-	0.0%	0	0.0%	0	0.0%
Regular repayments	11	91.7%	10,790,000	99.5%	8,282,000	99.8%
To be completed	0	0.0%	0	0.0%	0	0.0%
Not yet completed	1	8.3%	50,000	0.5%	15,000	0.2%
Guarantee called upon	0	0.0%	0	0.0%	0	0.0%
Total	12	100%	10,840,000	100%	8,297,000	100%

Source: Our calculations using MedioCredito Centrale data

In the vast majority of cases, the lenders providing support for innovative startups and certified incubators were the top five Italian banking groups (Type A). A significant contribution was also made by the smaller banks (Type E) particularly the local cooperative savings banks, which received applications for finance with an average that was significantly higher than the figure recorded for the large banks (€380,000 compared to €230,000 recorded for the larger banks).

Table 4.3.e: Distribution by type of bank (total startups and certified incubators)

TYPE OF BANK[29]	TRANSACTIONS	AMOUNT OF LOANS	AVERAGE SUM
A	1,206	277,288,461	229,924
B	123	33,428,063	271,773
D	47	8,388,000	178,468
E	289	109,725,713	379,674
GRAND TOTAL	1,665	428,830,236	257,556

Source: Our calculations using MedioCredito Centrale data

4.4 TAX INCENTIVES FOR INVESTMENTS IN EQUITY

The Italian venture capital market: a comparative overview

Private equity and venture capital are the main alternative to bank credit as a source of corporate finance. In comparison to other European countries, this is a channel that is still underused in Italy. In 2015 the total value of private equity investments was significantly below the levels found in countries such as France, Germany and the UK. The weight of Italy compared to Europe as a whole shows growth, representing a share of 2.4% compared to the 1.8% for the previous year, exceeding Spain (2.1%): Italy is the only one of the leading European countries with investments growing year on year. However, the gap is still very wide, compared to the 38.9% for the UK, 19.6% for France and 12.4% in Germany[30].

In particular, the most underdeveloped segment in Italian capital investments is venture capital – which concerns risk capital for companies in the startup phase or consolidation capital in sectors with high growth potential. Italy's contribution to the European total in this particular market segment in the last year was 0.8%, down from 0.9% in 2014. During 2015, there were 41 companies receiving venture capital investments compared to the 866 in Germany, 379 in France, 254 in the UK and 89 in Spain (source: EVCA).

According to data from AIFI[31] (the Italian Private Equity and Venture Capital Association), the seeding and startup segment showed growth in terms of the number of operations, which rose from 106 in 2014 up to 122 in 2015 (a 15% increase) and also in the amount invested, which rose from €43 million in 2014 up to €74 million in 2015 (+74%). In 2015, most of the startup operations were launched by early-stage operators, which made 37% of the investments in this segment, followed by generalist asset management firms (26%). There was less polarisation with the main operators compared to the previous year, both in

29 A=Top 5 banks; B=Other large banks or members of large banking groups; D=Small; E=Minor. C (Branches of foreign banks) are not included. V. "Banks" item in the Glossary published by Bank of Italy.

30 EVCA, 2015 European Private Equity Activity, May 2016.

31 AIFI, Il mercato italiano del Private Equity e Venture Capital nel 2015, March 2016.

terms of number (the top five operators handled 48% of the 122 investments compared to 65% in 2014) and also in terms of amount (with the top five responsible for 55% of the amount invested in this segment compared to 75% in 2014). The average investment rose by 50% from €607,000 compared to the €406,000 in 2014.

Another particularly interesting aspect in this area is angel investing: this is often the first link in the risk capital funding chain. Angel investors are individuals who directly invest part of their assets in the early stages of starting a business project, also assuming management responsibility alongside the project's protagonist. Compared to early stage and venture capital operators, business angels invest smaller amounts, but more quickly, intervening at the earliest stages of business.

Also in this respect, the Italian market is lagging way behind France and Spain, the European countries that are more similar to Italy in terms of culture and experience in industry. The number of startups involved in investment transactions is from 3 to 4 times lower and the number of recognised business angels is 3 to 6 times lower[32].

According to data from the IBAN (Italian Business Angel Network)[33], for operations carried out solely by business angels, there were 64 investment targets in 2015 (a clear reduction compared to the 110 of 2014), giving a total of €21 million invested (less than 2014).

More than 90% of the operations were conducted by Italian investors, with a total of 374 deals. The considerable gap between the number of investee companies and the number of investments confirms a steadily-growing, increasingly popular trend, also internationally. The investors tend to come together in syndicates or in club deals in order to obtain the total financial contribution and to reduce individual risk if the operation is unsuccessful. In this way they can also share experience and knowledge within the network.

Business angels invested an average of €328,000 in each target company, with a clear preference for startups (64.1%) compared to those in seeding phase (20.3%), those in expansion (9.4%) and pre-seeding (6.3%), once again confirming the trend to focus their attention on companies just starting out. The contribution of capital by business angels is mainly in the form of equity subscriptions, with a minimal part subscribed through shareholder loans or bank guarantees.

In 2015 the gap between North and South widened further: 72% of the investments made funded companies based in the north of Italy. The sector of greatest interest for business angels is once again ICT with 37.5% of investments made, led by Commerce and retail with 17.2% and professional and social services with 15.6%. 86% of the investee companies are listed in the special section for innovative startups. This figure has risen steadily over the past few years and is probably a result of the tax breaks available for those investing in this type of business.

32 EBAN, European Early Stage Market Statistics 2015.

33 IBAN-VEM, Early Stage in Italia, 2015 Report.

Extremely positive indications come from the 2015 Venture Capital Monitor Report[34], which was carried out by the Venture Capital Monitor Observatory (VeMTM) based at LIUC – Cattaneo University and by AIFI. The report highlighted that in 2015, in the wake of the three previous years, there was a new peak for investments in the early stage segment. 18% of investments were made by foreign investors, this figure has doubled compared to the last two years and has reversed the trend with regard to this segment of the risk capital market, evidence that there is a renewed flow of foreign capital into Italy.

Incentives for investments in startups

In order to strengthen the propensity to invest in seed capital and to increase the capacity of startups to attract private capital, in 2012 the government opted for the use of a fiscal lever by introducing temporary incentives for the three year period 2013-2015 (Article 29 of decree law 179/2012).

Decree law 76/2013 converted with amendments by law 99/2013 (the Labour Decree), the tax benefits that were originally planned for the 2013-2015 were extended until 2016. This extension was ratified in the European Commission decision of 14 December 2015 [C (2015) 9474 final].

In that decision, the Commission also approved the draft decree signed on 25 February 2016 by the Ministry for the Economy and Finance jointly with MISE, and published in Official Gazette No. 84 of 11 April 2016, referred to in section 1.8.

As already mentioned, individuals making cash investments in innovative startups are allowed a deduction from gross income tax equal to 19% of the amount invested, up to a maximum amount of €500,000. Companies, on the other hand, are allowed a deduction from taxable income of 20% of the amount invested in share capital, subject to a maximum amount of €1.8 million. The deduction rate for natural persons rises to 25% and the rate for companies is increased to 27% for investments in innovative startups with social goals, or which exclusively develop and market innovative high technology products or services for the energy industry.

These tax incentives are valid for both direct investments in startups, and indirect investments, through Collective Investment Entities (UCI) or other companies that invest primarily in this type of business.

There is a limit on eligible investments for each target company: the new decree of 25 February 2016 specified that the total amount of significant contributions cannot exceed €15 million for each startup, over a five year period.

The benefits are not granted to innovative startups and certified incubators or mutual funds or other companies that invest primarily in innovative startups to avoid encouraging fictitious duplications of investments, as well as ensuring the introduction of new capital in innovative startups.

34 LIUC, AIFI, Venture Capital Monitor – Italy Report 2015.

The following data relates to investments in innovative startups – the target of the mentioned incentives – made in 2014. The sources and data processing methods provided by Istat as part of its involvement in the Committee for the Monitoring and Evaluation of the policy for innovative startups describe the effects of the incentives with a delay of more than 18 months from the end of the year in which the related investments were made.

Data on investments by individuals in 2014

Revenue Agency data in tax returns for the 2014 tax period, acquired via the 2015 tax returns, show that 515 innovative startups directly or indirectly received investments in venture capital from private individuals. 88 intermediaries were also funded, namely mutual funds or other investment companies specialised in startup investments.

The investments directly or indirectly related to startups amounted to €26.3 million, on average just over €51,000 per startup. The minimum investment in a registered company was €1, with the highest amount being almost €1.2 million.

Indirect investments focused on mutual funds or other specialised investment companies amounted to almost €6.5 million. Each intermediary received €73,500 on average.

Overall, in 2014, the second year of application of the tax benefit, private individual taxpayers investing directly or indirectly in innovative startups invested a total of €32.8 million.

Direct investments represented a share of 80.3% of total contributions. Among the innovative startups that received investments, there was an average of 2.9 investors per startup, ranging from a minimum of 1 to a maximum of 22.

15.6% of the investments targeted 68 innovative startups with social goals or that exclusively develop and market innovative products or services with high technological value in the energy industry.

51.9% of the total incentivised investments targeted startups in the North-West (46.3% in Lombardy), followed at a distance by startups in the North-East, with 21.4% (11.7% in Emilia Romagna, 6.6% in Veneto), and Central Italy with 18.2% (7.2% to startups in Lazio). Innovative startups in the South received just 8.5% of the contributions (2.1% in Campania). The average investment per target company was higher than the average in the North-West (€69,000) and in the North-East (almost €54,000). The most significant incentivised investments at regional level were in Tuscany (€92,000). Startups in Valle d'Aosta received no aided investments.

75.1% of the target companies operate in the services sector and 68.4% of the contributions involved this type of company, while 26.4% went to industrial companies, which represented 18.8% of the companies, but which received an average of €72,000 of subsidised investment against €47,000 in service companies. 3.1% of the startups operate in the Commerce sector and received 3.7% of the investments covered by the incentive, whereby the average

investment was €62,000. 2.3% of the startups operate in the Tourism sector and received 1.2% of the investments covered by the incentive, whereby the average investment was €26,000. In 2014, investments were also made in three agricultural firms, with an average investment of €29,000.

1408 individuals invested in startups, averaging €24,000 per head, from a minimum of one euro up to a maximum of 1.2 million. Of these, 251 invested indirectly, also or exclusively, averaging €26,000 each; while the figure for those investing directly was lower (1,176 people, with an average of 22,400). Finally, 19 taxpayers made both direct and indirect investments.

Overall, a total of €6.6 million was deducted from personal taxable income, an average of €4,700 per taxpayer (for those investing in partnerships and for taxpayers investing in partnerships through companies opting for fiscal transparency under Article 116, the share deductible for startup investments is considered).

In 2013, deductions of almost €2.9 million were made, an average of €4000 per taxpayer.

Table 4.4.a: Incentivised direct investments by natural persons in 2014 by region in which the target innovative startups were located[35]

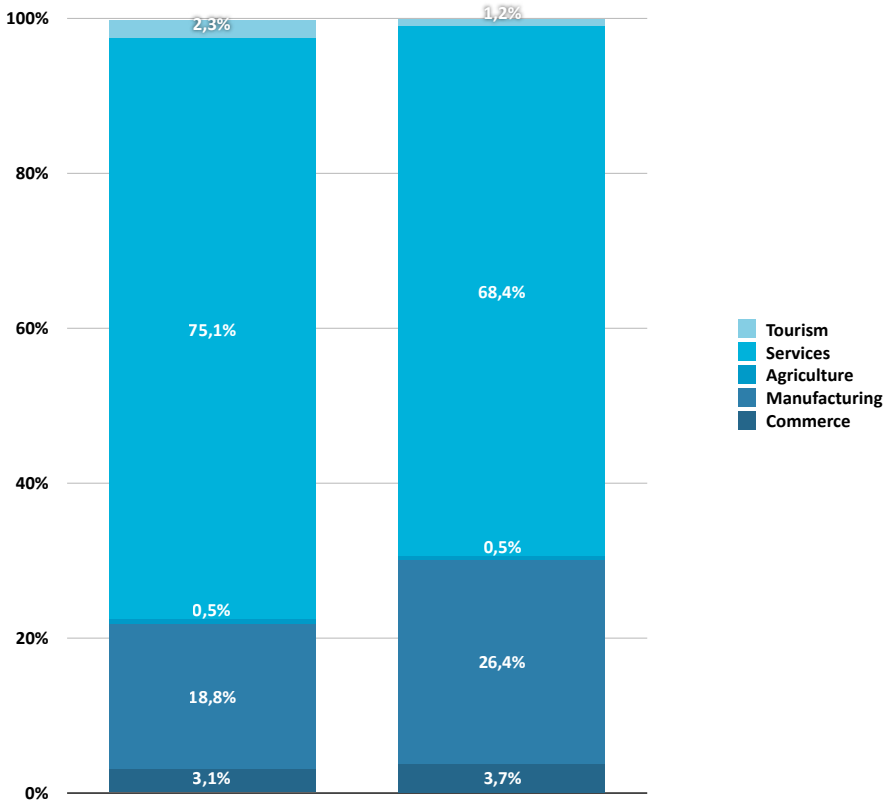
REGIONS	STARTUPS	INVESTMENTS (EUROS)	%	AVERAGE INVESTMENT (EUROS)
Lombardy	161	12,181,376	46.3%	75,661
Emilia-Romagna	55	3,073,654	11.7%	55,885
Tuscany	30	2,759,453	10.5%	91,982
Lazio	43	1,896,187	7.2%	44,097
Veneto	38	1,731,678	6.6%	45,570
Piedmont	27	1,345,844	5.1%	49,846
Campania	24	548,803	2.1%	22,867
Sicily	21	452,692	1.7%	21,557
Friuli-Venezia Giulia	12	440,544	1.7%	36,712
Trentino-Alto Adige	24	396,668	1.5%	16,528
Sardinia	11	387,730	1.5%	35,248
Abruzzo	6	280,030	1.1%	46,672
Calabria	14	242,087	0.9%	17,292
Puglia	17	176,144	0.7%	10,361
Liguria	11	128,475	0.5%	11,680
Molise	3	96,545	0.4%	32,182

35 The table does not include indirect investments when the target investment is not an innovative startup.

REGIONS	STARTUPS	INVESTMENTS (EUROS)	%	AVERAGE INVESTMENT (EUROS)
Umbria	4	76,028	0.3%	19,007
Marche	12	58,888	0.2%	4,907
Basilicata	2	58,847	0.2%	29,424
North-West	***199***	***13,655,695***	***51.9%***	***68,622***
North-East	***129***	***5,642,544***	***21.4%***	***43,741***
Centre	***89***	***4,790,556***	***18.2%***	***53,826***
South	***98***	***2,242,878***	***8.5%***	***22,887***
Italy	***515***	***26,331,673***	***100.0%***	***51,129***

Source: Based on Italian Revenue Agency data

Graph 4.4.1: Incentivised direct investments by private individuals in 2014 by native region of target startups[36]



Source: Based on Italian Revenue Agency data

36 The table does not include indirect investments when the target investment is not an innovative startup.

Compared to 2013 the number of target companies has risen by 52.4%; the number of startups in the South has more than doubled (from 48 to 98). The number of investments benefiting from tax incentives for individual taxpayers has almost doubled (from 13.6 up to 26.3 million; €12.7 million more), with a sharp increase also in the South and north-west (+151% and +113.4% respectively). The weighting of investments in startups in the North West has grown sharply (+4.8) and also for companies in the South (+1.9), while the weighting for the north-east and Central Italy has fallen. The average total investment has risen from 40,200 up to 51,100 in all regions.

Table 4.4.b: Incentivised direct investments by private individuals in 2013 and 2014 by native region of target startups

	STARTUPS	INVESTMENTS (EUROS)	%	AVERAGE INVESTMENT (EUROS)
2013				
NORTH-WEST	136	6,397,628	47.1%	47,041
NORTH-EAST	81	3,525,919	25.9%	43,530
CENTRE	73	2,779,367	20.4%	38,074
SOUTH	48	893,651	6.6%	18,618
ITALY	338	13,596,565	100.0%	40,227
2014				
NORTH-WEST	199	13,655,695	51.9%	68,622
NORTH-EAST	129	5,642,544	21.4%	43,741
CENTRE	89	4,790,556	18.2%	53,826
SOUTH	98	2,242,878	8.5%	22,887
ITALY	515	26,331,673	100.0%	51,129
% CHANGE % 2014/2013				
NORTH-WEST	46.3%	113.4%	4.8%	45.9%
NORTH-EAST	59.3%	60.0%	-4.5%	0.5%
CENTRE	21.9%	72.4%	-2.2%	41.4%
SOUTH	104.2%	151.0%	1.9%	22.9%
ITALY	52.4%	93.7%	0.0%	27.1%

Source: Based on Italian Revenue Agency data

Data on investments by legal entities in 2014

Tax returns data for the 2014 tax period acquired from the tax returns of limited companies presented in 2015 show that there were 187 innovative startups that have received direct or indirect investments in venture capital from companies. 33 intermediaries were also funded, namely mutual funds or other investment companies specialised in startup investments.

Incentivised investment reached the sum of €15.3 million, an average of €82,000 per startup (although the median value was €22,500): the minimum investment in a registered company was €1, while the highest was €1.4 million.

Indirect investments focused on mutual funds or other specialised investment companies amounted to almost €2.2 million. Each intermediary received €68,200 on average.

In 2014, the second year of application of the tax benefit, joint-stock companies invested €17.5 million in innovative startups overall. The number of investors per startup ranged from a minimum of 1 to a maximum of 7.

Direct investments represented a share of 87.2% of total contributions. 10.7% of investments went to 20 innovative startups with a social goal, or to cleantech enterprises.

45.7% of the total incentivised investments targeted startups in the North-West (36.3% in Lombardy), followed by some distance by startups in the North-East, with 31.5% (18.4% in Trentino Alto Adige), ahead of Central Italy with 11.9% (6.6% to startups in Lazio, 4.9% in Tuscany). Innovative startups in the South received 10.9% of the contributions (4.9% in Abruzzo, 3% in Calabria).

The average investment per target company was considerably higher in the North-East, where it exceeded €98,000. Regionally, the highest incentivised investments were found in Trentino Alto Adige (averaging €256,000). Startups in Umbria and Valle d'Aosta did not receive any incentivised investments from joint-stock companies.

67.4% of the target companies operated in the services sector, and 68.3% of the contributions involved this type of company, while 25.1% went to industrial companies, which represented 27.3% of the startups, but which received an average of €75,000 of aided investment, not far ahead of the €83,000 for service companies. 4.3% of the startups operate in the Commerce sector and received 5.9% of the investments covered by the incentive, where the average investment was €112,000. Investments were also made in two agricultural firms, in 2014.

The 256 corporate investors pledged a minimum of €1 to a maximum of €1.4 million, about 69,000 each on average, even though the median was just over €22,000.

Of these, 45 made indirect investments, an average of approximately €50,000 each, while for the remaining 217 companies that made direct investments, the average was higher (€70,500). 6 taxpayers made both direct and indirect investments.

26 companies invested in startups with a social goal or clean tech energy businesses, with a value per investor of €74,000.

The total amount deducted from the corporation tax base was €3.6 million, an average of €14,200 per taxpayer, translating into a fiscal benefit of €3900.

In 2013, almost €3 million was deducted from the corporation tax base, an average of €23,300 per taxpayer, with a benefit of €6400.

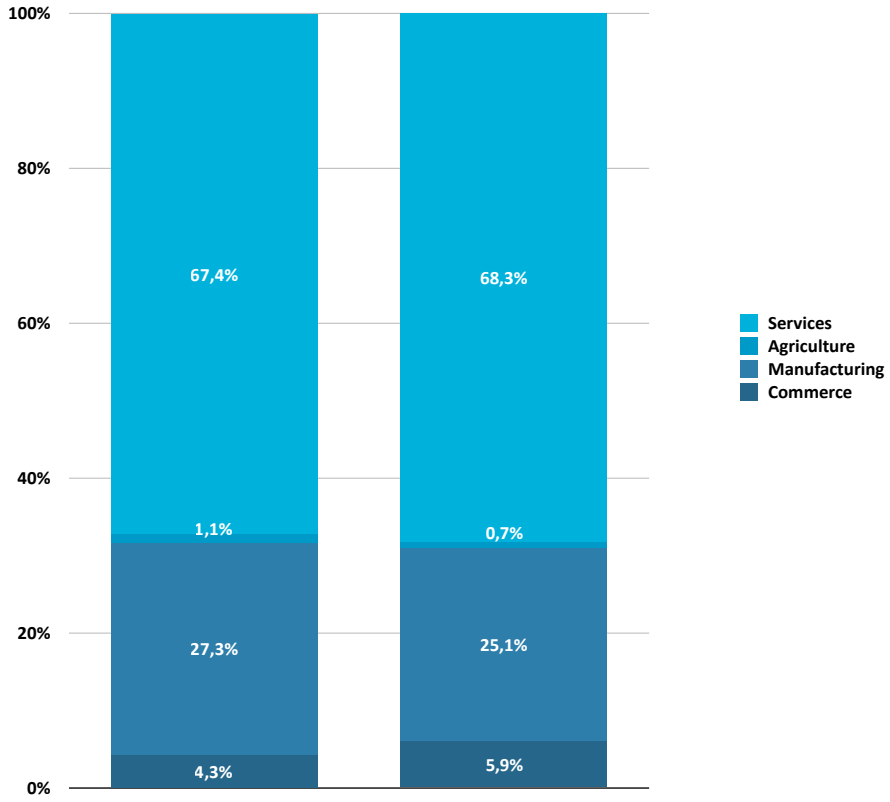
Table 4.4.c: Incentivised direct investments by joint-stock companies in 2014 by native region of startups[37]

REGIONS	STARTUPS	INVESTMENTS (EUROS)	%	AVERAGE INVESTMENT (EUROS)
Lombardy	54	5,549,254	36.3%	102,764
Trentino-Alto Adige	11	2,814,530	18.4%	255,866
Veneto	15	1,031,650	6.7%	68,777
Lazio	14	1,004,695	6.6%	71,764
Emilia-Romagna	21	886,084	5.8%	42,194
Liguria	5	816,200	5.3%	163,240
Abruzzo	2	750,000	4.9%	375,000
Tuscany	13	748,537	4.9%	57,580
Piedmont	18	631,404	4.1%	35,078
Calabria	5	458,153	3.0%	91,631
Campania	8	283,754	1.9%	35,469
Sardinia	3	85,600	0.6%	28,533
Friuli-Venezia Giulia	2	80,000	0.5%	40,000
Puglia	3	72,350	0.5%	24,117
Marche	10	59,786	0.4%	5,979
Molise	1	20,000	0.1%	20,000
Sicily	1	1,408	0.0%	1,408
Basilicata	1	700	0.0%	700
North-West	***77***	***6,996,858***	***45.7%***	***90,868***
North-East	***49***	***4,812,264***	***31.5%***	***98,209***
Centre	***37***	***1,813,018***	***11.9%***	***49,000***
South	***24***	***1,671,965***	***10.9%***	***69,665***
Italy	***187***	***15,294,105***	***100.0%***	***81,787***

Source: Based on Italian Revenue Agency data

37 The table does not include indirect investments when the target investment is not an innovative startup.

Figure 4.4 2: Incentivised direct investments by joint-stock companies in 2014 by sector of activity of the startup[38]



Source: Based on Italian Revenue Agency data

Compared to 2013 the number of target companies has risen by 48.4% nationally, peaking at 63.8% in the North West. There was a positive change of 24.9% in the number of investments benefiting from tax incentives for corporate investors (from 12.2 up to 15.3 million; 3.1 million more), with an extremely sharp rise in the percentages for the South and north west +255.4% and +89% respectively). The weighting of investments in startups in the North West has risen sharply (+15.5) and to a lesser extent for companies in the South (+7.1), while the weighting for the north-east and Central Italy has fallen. The average amount of investments has fallen from 97,200 to €81,800, while it has doubled in the South.

38 The figure does not include indirect investments when the target investment is not an innovative startup.

Table 4.4.d: Incentivised direct investments by joint-stock companies in 2013 and 2014 by native region of target startup

	STARTUPS	INVESTMENTS (EUROS)	%	AVERAGE INVESTMENT (EUROS)
2013				
NORTH-WEST	47	3,701,485	30.2%	78,755
NORTH-EAST	33	5,795,243	47.3%	175,613
CENTRE	30	2,278,338	18.6%	75,945
SOUTH	16	470,434	3.8%	29,402
ITALY	126	12,245,500	100.0%	97,187
2014				
NORTH-WEST	77	6,996,858	45.7%	90,868
NORTH-EAST	49	4,812,264	31.5%	98,209
CENTRE	37	1,813,018	11.9%	49,000
SOUTH	24	1,671,965	10.9%	69,665
ITALY	187	15,294,105	100.0%	81,787
VAR. % 2014/2013				
NORTH-WEST	63.8%	89.0%	15.5%	15.4%
NORTH-EAST	48.5%	-17.0%	-15.8%	-44.1%
CENTRE	23.3%	-20.4%	-6.7%	-35.5%
SOUTH	50.0%	255.4%	7.1%	136.9%
ITALY	48.4%	24.9%	0.0%	-15.8%

Source: Based on Italian Revenue Agency data

With reference to partnerships, Revenue Agency data showed that in 2014, there were eight investments that took advantage of the tax deduction available to those investing in innovative enterprises. Overall, they invested €672,000 in six companies located in Lombardy (4) and Veneto (2), 5 of which operate in the field of business services and one in agriculture. The taxpayers deducted a total of €134,000 from their income (17,000 per taxpayer). In 2013, the 5 investments in partnerships amounted to €83,000, targeting 5 companies based in Lombardy (2), Piedmont (2) and Veneto (1), 3 operating in business services and 2 in the manufacturing sector. Partnership investors deducted a total of almost €17,000 from their income (3300 per taxpayer).

With regard to non-commercial entities, in 2014 only a single taxpayer invested in an innovative startup (in 2013 there was no investment of this type).

To conclude, in 2014 there were a total of 1,673 investors (849 for the preceding year – individuals and companies) who invested directly or indirectly in innovative startups with funds amounting to €51 million (€28.3 million in 2013):

- Investments made by individuals amounted to €32.8 million (of which 6.5 million in the form of indirect investment) and targeted 515 innovative startups. Deductions from personal income tax amounting to almost €2.9 million were granted;
- Incentivised investments from joint-stock companies amounted to €17.5 million (of which €2.2 million were in the form of indirect investments) and involved 187 innovative startups. Deductions from IRES taxable income for almost €3 million were granted.
- Incentivised investments made by partnerships amounted to €672,000, and involved six innovative startups. Income tax deductions amounting to €134,000 were granted.

Compared to the previous year, there has been an increase mainly in the investments by individuals (14.5 million in 2013), with a smaller increase for joint-stock companies (13.7 million) and partnerships (€83,000). The number of target companies has risen for all types of taxpayer (individual 338, companies 126 and partnerships five), and therefore there has also been a rise in the tax benefits.

Summarising the key aggregate data for the two years in question, the situation is as presented in Table 4.4.e below.

Table 4.4.e: Total investments and startups with investments by individuals and companies, evolution in 2013 and 2014

	2013	2014	% CHANGE %
Tot. (euros) investments by individuals	13,596,565	26,331,673	51.64%
Tot. (euros) investments by companies	12,245,500	15,294,105	80.07%
Tot. (euros) incentivised investments	**25,842,065**	**41,625,778**	**62.08%**
No. of target startups: individual investors	338	515	65.63%
No. of target startups: corporate investors	126	187	67.38%
No. of target startups	**464**	**702**	**66.1%**

4.5 EQUITY CROWDFUNDING

As described in section 1.7, Italian laws on equity crowdfunding have been radically simplified and improved over the past two years.

The 1st Report on CrowdInvesting published on 29 June 2016 by the Crowdfunding Observatory at the School of Management at Milan Polytechnic, highlights that market growth forecasts have been confirmed both nationally and internationally.

According to estimates in the Massolution Crowdfunding Industry Report for 2015, equity crowdfunding, globally, exceeded $2.5 billion in that year, having started from almost 0 in 2012.

According to figures from the Cambridge Centre for Alternative Finance[39], in the same period the United Kingdom raised £332 million through the national equity crowdfunding platforms. £87 million of that amount was in the real estate sector and represents an increase of 400% on 2014. This represents no less than 15.6% of total risk capital finance channelled into non-public companies in the UK.

The Cambridge Centre for Alternative Finance[40] also reported lower figures for other European countries, with a total of €159 million in 2015 equating to an increase of 93% on the previous year. France heads the list with 76 million raised, followed by Germany at 24 million and the Netherlands with €17 million. As can be seen in detail below, Italy achieved a total of €5.6 million raised as of 30 June 2016. This is a modest amount but the pace has picked up considerably in recent months partly also thanks to the legislative and regulatory changes referred to above. The intervention of the European Commission to harmonise current regulations within the Member States is currently the subject of debate.

In the United States, equity crowdfunding has not yet unleashed its potential due to particularly stringent regulations on the offer of securities, which were only updated in 2012 with the JOBS Act (Jumpstart Our Business Startups Act). Prior to 2016, equity crowdfunding was only available to a very limited section of the population known as "accredited investors", in other words individuals with wealth of at least $1 million (excluding their own homes) and annual income of at least $200,000 – 300,000 including the spouse – corresponding to 3% of American citizens. In May 2015, the SEC (Securities & Exchange Commission, the American equivalent of Consob) gave the green light to the implementing rules in Title III of the JOBS Act, which definitively entered into force on 16 May 2016[41]. According to the new provisions, non-accredited investors can invest up to 5% of their annual income or net wealth in a single offer, but up to a maximum of $2,000 per transaction and no more than $100,000 in other offers, within a 12 month period. The crowdfunding limit for companies, which must be based in the USA, is $1 million.

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39 See the report "Pushing boundaries: The 2015 UK Alternative Finance Industry".

40 See "Sustaining momentum: The 2nd European Alternative Finance Industry Report".

41 See the SEC website: https://www.sec.gov/spotlight/jobs-act.shtml

Analysis of findings as of 30 June 2016

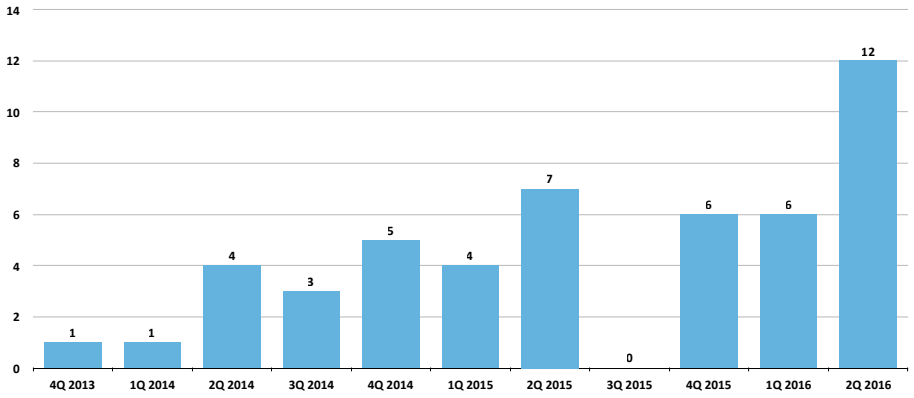
Since the Consob regulation was introduced, in 2013 the Observatory at Milan Polytechnic has published an equity crowdfunding dashboard on its website. This tool is of vital importance in raising awareness and providing information about this topic. This section, produced with the valuable assistance of Prof. Giancarlo Giudici, is based on the dashboard's findings.

As of 30 June 2016, there were 19 sites registered on the official Consob register. 18 of them had been authorised by the regulator and entered in the "ordinary section" while 1 was operating in accordance with the current laws and was noted in the "special section", which is open to banks and licensed investment firms after making the necessary communication to Consob.

Compared to the previous year, there has been an increase in these sites (the previous edition of this Report identifies 17 as of 31 August 2015) with various "new entries". However some of the previously-authorised operators have now terminated these operations: they are Symbid Italia which left in May 2016, Smarthub and Starzai, which left in the second half of the year. 14 sites had published projects up to June 2016. ***The site with by far the largest number of published projects (16) was Starsup.***

The graph below shows the gradual growth of the market over recent months, with no fewer than 12 campaigns published during the second quarter of 2016 alone.

Figure 4.5 1: Timescale of equity crowdfunding campaigns on licensed sites, by quarter



Source: Crowd Investing Observatory – PoliMi

According to data gathered by the Crowdfunding Observatory of Milan Polytechnic, on 30 June 2016 a total of 49 campaigns had been published (24 more than the same date in the previous year). 20 had been concluded successfully, 17 unsuccessfully and 12 were still open on the stated date (two of them had already reached the minimum target). The rate of success is therefore

just above 50%, which is in line with the situation in other European countries.

The average amount of capital requested was €311,764, therefore far below the permitted maximum of €5 million. The minimum value was €50,000 and the maximum was €1,000,227. The average share of risk capital offered was 22.43% (with a minimum of 0.95% and a maximum of 86.97%). No significant changes compared to the previous year were recorded for these two statistics. In 31 cases out of 49, the subscription of ordinary shares of capital was offered, while in 9 cases only shares without voting rights were available. In another 9 cases, the offer contained shares of both types. 2016 also saw the first offer by an innovative startup investment vehicle (Club Italia Investimenti 2, on the MamaCrowd platform).

On 30 June 2016, the total capital raised since the portals were launched amounted to 5,565,356 million euros, an increase of 140% compared to the situation a year earlier.

The majority of the 48 companies[42] that launched equity crowdfunding campaigns came from Lombardy (35% of cases) followed by Tuscan businesses (14%). The most-represented business areas were ICT (23%), services and the sharing economy (21%) and professional services (19%). As these are very young businesses, a large number of them have limited turnover (the median value is around €17,000) and clearly the majority had not posted any profits on their balance sheet at the time of the campaign.

Below is a brief description of the companies that successfully concluded their equity crowdfunding campaigns in the 12 months prior to 30 June 2016. They are all innovative startups, with the sole exception of Synbiotec s.r.l. (innovative SME).

Brainseeding s.r.l., based in Massafra (Taranto), in 2016 (website: Muum Lab). This startup runs the ProntoVet24 platform, a professional home veterinary service supported by local clinics. The customer decides the time of the home visit, which is available 7 days a week, 24 hours a day, then pays and waits for the vet to arrive. The campaign raised €50,000, which was subscribed by a single investor.

CleanBnB s.r.l., Milan, 2016 (Crowdfundme). This startup offers management services for short-term property rentals. The amount raised was €126,702, more than double the amount initially requested, and was collected from 90 investors.

Enki Stove s.r.l., Livorno, 2015 (StarsUp). Enki Stove is an innovative startup formed in November 2015. Its aim is the research, development and distribution of clean-tech pyrolytic heating and cooking appliances, which are eco-friendly, safe and low-cost. The funding campaign yielded €240,000 from 41 investors.

Kiunsys s.r.l., Campochiaro (CB), 2011 (StarsUp). Kiunsys, a spin-off of the University of Pisa, supports the city with Smart Mobility solutions, to renew

42 The difference recorded on 30 June 2016 between the campaigns promoted (49) and the promoters (48) is because one of the companies, Cynny SpA, ran two different offers on two different sites.

and integrate mobility and parking facilities, on a new, innovative platform. The campaign raised €505,298.

Maxtrino s.r.l., Cagliari, 2011 (StarsUp). This company has created a software program that automatically records and archives invoices without changing the compatibility program. 49 investors contributed to the project, raising €226,652 in capital.

Me Group s.r.l., Passirano (BS), 2013 (TIP Ventures). Innovative startup that created and owns the patents and design for the new, lightweight ME electric scooter made from Sheet Moulding Compound. The company raised €300,000 from 10 new shareholders.

Media Vox Pop s.r.l., Salò (Brescia), 2015 (Wearestarting). This innovative startup created Vox Pop, a site that gives journalists and the online community the opportunity to communicate using a question and answer system based on short video clips. Vox Pop believes in democratic participation by the public, in support of important issues for the community. The company raised €60,000 from 39 new shareholders.

Nextop Italia s.r.l., Sassari, 2013 (TIP Ventures). This startup offers Wayonara, a social commerce travel site that people can use to share travel experiences, find inspiration and ideas, plan and book their trips using any means of transport. They can also share their experiences with others. The company raised €135,000 from 33 investors.

P2R s.r.l., Bergamo, 2013 (OPStart). This startup has created NiuRion, a professional, interactive neuro-motor rehabilitation kit that patients can use to check and self-correct their physiotherapy exercises using an interactive video game platform linked to inertia sensors that analyse and capture their movements. The company raised €150,000 from 44 investors.

Synbiotec s.r.l., Camerino (MC), 2005 (Next Equity). Synbiotec is the first innovative SME to run its own equity crowdfunding campaign, and raised €1,000,227 from 38 investors. The company operates in the research, development and production of probiotics, living micro-organisms that have a beneficial effect on human and animal health.

Xnext s.r.l., Milan, 2014 (Equinvest). Xnext is an innovative startup that was formed in January 2014, with the aim of developing and marketing advanced X-ray inspection systems for industrial scanning and security, which are now available worldwide. The campaign attracted 32 investors who pledged €462,412, 40% of which came from abroad.

Investor characteristics

According to the study mentioned by the Crowdfunding Observatory of Milan Polytechnic, a new survey of investors in the Italian equity crowdfunding market[43], conducted on 365 individuals showed that the investors' average age was 45; 82%

43 The survey covered 14 campaigns that were concluded successfully as of 30 June 2016.

were male and 15 of them had invested in multiple campaigns. 28% are based in Lombardy. 39% are based in the same region as the target company. The average investment sum was €9,000. A significant number of subscriptions (43%) were below €500, a threshold that indicates the restrictions on ordinary members of the public acting as investors, due to the appropriateness assessment. Another group of subscriptions, representing 37% of the total, pledged a sum of between €500 and 5,000. There were also larger investments, made by legal entities and professional investors including business angels. The sample included six pledges of €100,000 or more received from individuals. 96% of the investors funded only a single campaign, while 4% (14 people) funded more than one.

The surveyed investors also included 43 legal entities, which were banks and insurance companies in four cases, certified business incubators and professional investors in closed venture capital and private equity funds, as their contribution was necessary in order to reach the 5% minimum offer threshold required by Consob. The largest categories were those of service and consulting firms (16 cases) which together with the financial holding companies (4 cases) and the 3 real estate firms, are probably used as vehicles to manage the investments. There are also 6 manufacturing companies, who may be looking to diversify their investments into innovative startups by pursuing an interest in a certain technology or service.

Final considerations

Italy's equity crowdfunding market is growing steadily, although the volumes are lower than those for the UK and other European countries.

According to the same report of the Milan Polytechnic Observatory, the opening up of this resource to innovative SMEs and investment vehicles, and in particular the simplification of some of the requirements stipulated in the Consob Regulation, have completed the regulatory framework and have laid the foundations for a change of gear, which has been demonstrated by the increasing level of interest that companies are now showing in crowdfunding.

As further confirmation that this form of investment is now gaining ground, many of the authorised websites have joined together to form the Italian Equity Crowdfunding Association), an industry association that has a permanent dialogue with the institutions and financial stakeholders.

The impression gained by the Observatory is that investment opportunities are considered by a small group of highly-aware investors and also by family and friends, and others who have personal connections with the business owners. The increase in the fiscal allowance for investments in innovative startups, as provided for in the 2017 Stability Act, could further raise the market's awareness of this opportunity.

4.6 ITA INTERNATIONALISATION SERVICES AND ITALIARESTARTSUP 2015

As provided for in Article 30(7) and (8) of the Degree Law 179/2012 ("Growth 2.0 Decree"), ITA (the Italian Agency for the International Promotion of Italian Business, "Agenzia ICE") offers a wide range of services targeted to the international expansion of innovative Italian startups. Specifically:

"7. The Italian recipients of the ITA Agency's services as referred to in Article 14(18) of decree law 98/2011 converted with amendments by law no. 111/2011 as amended, and by the "Italy Desk" referred to in Article 35 of this decree, also include the innovative startups referred to in Article 25(2). The Agency provides these companies with regulatory, corporate, fiscal, real estate, contractual and credit advice. The Agency also identifies the main trade fairs and international shows that are free to innovative startups, taking into account the relevance of their business to the subject of the event. The Agency organises events to bring match potential investors with innovative startups in the early stage capital and growth capital phases.

8. ITA will perform the above services with the human, instrumental and financial resources provided for under current legislation".

Article 4(9) of decree law 3/2015 ("Investment Compact") extended this provision to innovative SMEs.

From November 2015, following the restructuring of the Agency, these activities are carried out by the Industrial Technology, Energy & Environment Office.

In implementation of these legal provisions, innovative startups - and, from 22 September 2015 also innovative SMEs (see par. 1.3) – can request a dedicated Service Card which gives the right to a 30% discount on the cost of the Agency's services. Where funds are available, the ITA also offers selected startups the opportunity of taking part in free promotional events.

In addition to the above services, during the Report period, the Agency organised, or helped to organise a number of promotional events for innovative startups, to bring them into contact with national and international investors.

These initiatives include the second edition of ItaliaRestartsUp, held on 22 and 23 October at SMAU Milan 2015. The renewed choice of Milan as the venue, as in 2014, leverages some of the characteristics of the innovative business community, as many innovative startups are based in the city together with a number of investment funds and business angels; the synergy with Smau offers a broader setting for the venture, with added value in terms of contact with foreign investors.

102 startups attended the event. They were selected from the 274 applications received (an increase of 35% compared to 2014), by a committee of public and private experts. There were 54 international investors, who were chosen by ITA's international team, from among 100 candidates. They came from 20 different countries, notably South Korea, France, the UK and Taiwan. Added to these were 14 Italian investors, 17 business incubators and 5 local development entities.

The event began with an institutional presentation followed by four themed seminars on sectors of interest to some of the most highly represented startups: software, e-commerce, life sciences, energy production and management, and mechanical and electronic engineering. In the afternoon of 22 October, there were 870 meetings between innovative Italian startups and foreign investors. The meetings were arranged by ITA based on the declarations of interest expressed by the investors ahead of the event. During the run-up to the event, investors had received full details of the startups, in English. These meetings continued the next day, with the involvement of the business incubators and local development agencies so that the investors could understand the specific characteristics of the local business context in Italy.

According to the ITA report, the feedback from participants was positive, also compared to the results of the customer satisfaction survey held at the end of the previous edition. The positive factors most frequently mentioned were the series of business meetings between foreign investors and startups, and the high quality of the selected innovative enterprises.

Also in collaboration with SMAU, ITA's Berlin office organised ItaliaRestartsUp Berlin between 15 and 17 June 2016. The aim was to promote the Italian innovative business community among the stakeholders of one of the most dynamic cities in Europe.

The event opened on 15 June with an informal networking meeting at the Italian embassy. This was followed the next day by a series of B2B meetings, accompanied by pitching sessions and round tables with experts from the agri-food, digital manufacturing, fintech, tourism, fashion and design industries. On 17 June, visits were arranged to some of Berlin's leading business incubators and accelerators.

Other events were organised by ITA's local offices as part of major international innovation events. A highlight was the attendance at unBound Digital 2015 (London, 30 November-1 December 2015), by 55 innovative startups. Each enterprise, selected by the business incubators and accelerators in Italy, had its own stand. The startups also received support from ITA in connection with organising B2B meetings with VC, business angels and banks.

ITA Singapore also sent 4 startups, 3 business incubators and representatives of the Italia Startup Association to InnovFest unBound, which was held in Singapore between 17 and 18 May. The agency also attended a seminar session on the opening day, "Building Startup Ecosystems around the world", focusing on measures that governments can take in order to anticipate and exploit the megatrends of the future, which will involve the people of the world's major cities.

The ongoing support services include the Innovation Desks, which were launched in the summer of 2014 and are now found in Los Angeles, Mumbai, London and Singapore (the last two are new desks, with the Singapore office opened to replace the Hong Kong one). The desks are staffed by local experts with specific knowledge to assist the innovative enterprises and research centres, provide support in sourcing investment funds, business angels and other financial and industrial backers interested in investing in Italian startups.

A scouting and training campaign has also been launched for innovative startups, by MISE, ITA and Assocamerestero. 20 innovative startups underwent a selection process organised by the agency, and were then admitted to a mentoring service. After that, the selected startups will spend between 3 to 6 months at an Italian Chamber of Commerce in a foreign country, to work directly with the local market.

In the second half of 2016, ITA contributed to ICT Forum Sardinia (Cagliari, 6-7 October) as part of Sinnova, the Sardinian innovation event organised by Sardinia Ricerche, Slush (Helsinki, 30 November-1 December), accompanying 30 innovative Italian startups, and unBound Digital (London, 7-8 December). It also organised Italian Startups Meet Borsa Istanbul Private Market (Istanbul, 13 October), a pitching session with local and international investors, and the new edition of ItaliaRestartsUp (Milan 25-26 October, at Smau). These events will be reported on in the next edition of the annual report.

4.7 ITALIA STARTUP VISA AND HUB

Following the launch of Italia Startup Visa, in June 2014[44], Italy became one of the first countries in Europe to test a new visa policy intended to attract innovative entrepreneurs from outside the EU[45].

With the introduction of new procedures for the authorisation and issue of entry visas, the governments intend to remove the primary barrier to incoming talent and entrepreneurial expertise from other countries. This type of policy is expected to enrich the local business community, which becomes stronger as it absorbs new expertise and learns new methods of working, forging new relational networks. The 2015 Annual Report offers a comprehensive overview of scientific literature supporting the theories of the importance of attracting innovative talent, for a country's economic development (pp. 121-123).

In most European countries, compared to other advanced economies, it can be seen that there is a relatively limited presence of highly qualified migrants in the business community. The European Commission itself has on several occasions acknowledged that Europe has not yet managed to fully exploit its powers of attraction, and is suffering in terms of competitiveness and innovation[46]. At policy-making level, this awareness has led to the launch of preliminary discussions, launched by the current Dutch Presidency of the EU, about a European Startup Visa project[47].

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44 See http://www.mise.gov.it/index.php/it/per-i-media/notizie/2030932-italia-startup-visa-procedure-piu-snelle-e-veloci-per-attrarre-imprenditori-innovativi-esteri

45 For more information about the types of Startup Visa and the various country models, refer to the "Visa Policy for Startups", the report on the Polish innovation agency Startup Poland (2016): http://startuppoland.org/wp-content/uploads/2016/06/ProgramyWizowe_v14EN_final.pdf

46 Juncker J. C., A New Start for Europe: My Agenda for Jobs, Growth, Fairness and Democratic Change. Political Guidelines for the next European Commission (2014).

47 Council of the European Union, Draft Council conclusions on Research and Innovation friendly regulation, 8675/16 (13 May 2016) http://data.consilium.europa.eu/doc/document/ST-8675-2016-INIT/en/pdf

In order to fully appreciate the innovation of the Italia Startup Visa programme, it is helpful to look at the operation of the ordinary visa process for the self-employed, which it is intended to replace[48]. A business owner who is a citizen of a non-EU country and wants to set up a company in Italy other than an innovative startup faces a procedure based on a three-tier preliminary check by the local Chamber of Commerce[49], which will verify compliance with the Italian legal requirements for the specific business (such as registration on professional rolls or registers); adequate funding for the business, according to the reference parameters established by the Chamber of Commerce; certification from the relevant public authority that there are no impediments to that activity (authorisations and permits etc). A non-EU national who is not yet resident in Italy must require a temporary authorisation to enter the country from the local police headquarters, after having produced the Chamber of Commerce authorisation, following the above checks[50]. In the absence of a local representative, this obligation requires the visa applicant to be physically present in Italy.

The innovations introduced by the Italia Startup Visa programme are summarised below:

- The process is completed online: applicants can only send their documents by ordinary email, to the address italiastartupvisa@mise.gov.it;
- The process is also available in English: the application forms, programme guidelines and customer care services have all been translated;
- The procedure for the issue of the visa approval is fully centralised: MISE, represented by the Directorate General for Industrial Policy, Competitiveness and SMEs, handles all communications with the authorities (police headquarters, diplomatic and consular offices and the Ministry for Foreign Affairs) and is also the single point of contact for visa applications;
- It is a fast procedure, with visas usually being issued within 30 days from the date on which the application is officially submitted.

The Italia Startup Visa committee of experts is responsible for checking the applicants' eligibility: this basically involves checking that the business model can be defined as an innovative startup, that the applicant's employment and educational background corresponds to the proposed business model, and that the startup has funds of more than 50,000 euros. The panel is chaired by the Ministry's Director General for Industrial Policy, and is formed of the presidents

48 For an extensive presentation of how the Italia Startup Visa programme operates, refer to the guidelines published on the institutional website italiastartupvisa.mise.gov.it

49 At the time this report went to press, there were 98 Chambers of commerce, which are typically located in the main provincial towns. See http://www.unioncamere.gov.it/uploaded/Generale/Sistema%20Camerale/Autoriforma/2016/2016%2009%2001_Elenco%20aggiornato%20CCIAA.pdf

50 See https://www.to.camcom.it/sites/default/files/registro-imprese/guida_stranieri_09-2005.pdf

of 5 leading associations for innovative Italian business: IBAN for business angels, the venture capital committee of AIFI, PNICube for university business incubators, APSTI for science and technology parks, and NetVal for technology transfer centres. At the same time, the Ministry's back office will send the applicants a form to apply for temporary permission to enter Italy, to be sent to the relevant police authority.

If both responses are favourable, the Committee issues an approval with a qualified majority and the police authority raises no security concerns, the applicant will receive a copy of the authorisation for an independent startup. This can be used to obtain a permit to stay for the self-employed, from the consular office in the applicant's home country.

Italia Startup Visa is supported by a very similar procedure, Italia Startup Hub, which means that the fast-track procedure can also be extended to non-EU nationals with a regular permit of stay (obtained for study purposes), who want to remain in Italy after their studies to launch an innovative business. The Italia Startup Hub programme allows innovative entrepreneurs already based in Italy to convert their expiring permit to stay without having to leave the country, and they can use the same simplified procedure that is available for the granting of startup visas. The focus has now shifted to retaining human capital in Italy. This programme has mainly been designed for international students, by simplifying the legal situation regarding their continued residence in Italy after they have completed their studies.

There were two major new reporting developments during the 2016 Annual Report period. 1 January 2016 saw the launch of a series of periodic performance reports on the Italia Startup Visa and Italia Startup Hub programmes: the "Annual report and periodic reports" on the Ministry's website: the reports published to date cover the last four months of 2015 and the first two of 2016.

On 22 April 2016, the website italiastartupvisa.mise.gov.it received an injection of new graphics and content, with the introduction of a new section on Italia Startup Hub (italiastartuphub.mise.gov.it). The section includes dedicated guidelines (in English and in Italian), as well as forms applicable to this programme. Versions of the application forms are also available for Italia Startup Visa.

As can be seen from the data in this Report, in recent months Italia Startup Visa has seen a considerable rise in the number of declarations of interest and applications received. In response to the new demands now received from applicants and the administration, Italia Startup Visa and Hub are changing from straightforward visa issue procedures into "programmes" in the real sense of the word. They now include new support and supervision tools to assist visa applicants, and go beyond the post-approval phase.

In addition to a help desk service, available at info.italiastartupvisa@mise.gov.it, which applicants can contact to report issues related to immigration procedures and business activity, April 2016 saw the release of the first systematic survey of visa holders, the

#ISVsurvey. A summary of the survey results, which has provided a considerable boost to the information available to the Ministry, can be found in this section.

Other experimental outreach initiatives were launched in September 2016, including a series of themed webinars (organised with the National Agency for inward investment and business development, Invitalia), on issues of particular importance for entrepreneurs relocating to Italy in order to launch an innovative business: the regulations on innovative startups, with an in-depth explanation of the legal requirements and incentives available to this type of enterprise including the Smart&Start programme and the new online incorporation procedure; the SME Instrument - Horizon 2020, elements of corporate and fiscal law, and a presentation of the key players in the world of innovative enterprise in Italy.

Italia Startup Visa: main results

By 31 August 2016, 132 applications had been received for the Italia Startup Visa (italiastartupvisa.mise.gov.it), which was launched on 24 June 2014. 94 (71.2%) of these were successful, resulting in the issue of approval for a startup visa. 33 (25%) were unsuccessful and another 5 are still pending, awaiting other documentation required by the technical committee for both programmes.

The main reason for the applications being refused was that the business model was not sufficiently innovative: this was the case for 22 out of the 33 rejections. 11 applicants were rejected even before being put forward for approval by the committee, as the preliminary checks found that the project clearly lacked the funding or the innovative criteria required for participation in the programme.

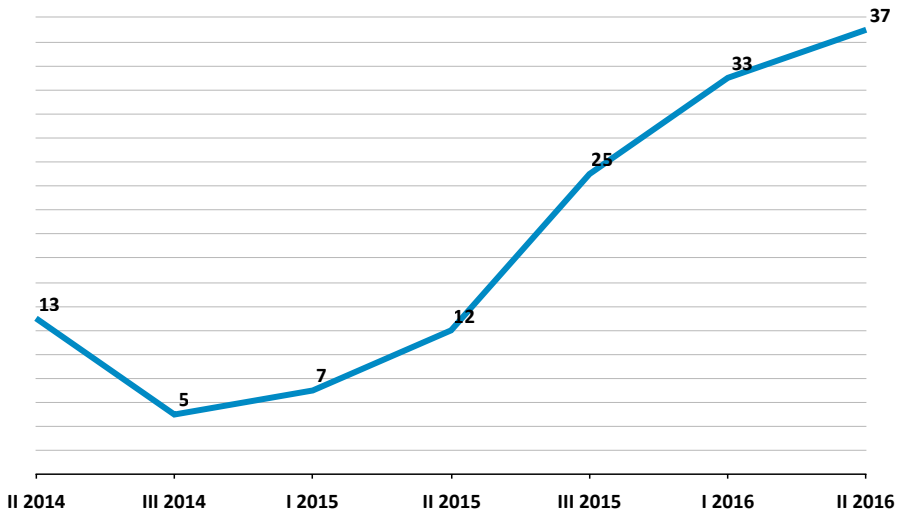
Of the 94 projects that received approval, 10 informed the Ministry that they had decided not to relocate to Italy. There are thus 84 of startup visa holders.

18 applications were received in 2014, 44 in 2015, and no fewer than 70 in the first 8 months of 2016: 33 in the first four months of the year and 37 in the second. More applications were received in 2016 alone than in the whole of the preceding 15 months.

Looking solely at the main reference period for the 2015 annual report (1 July 2014 to June 2015) and 2016 (1 July 2015 - 30 June 2016), the number has almost tripled from 30, to 88 applications.

The second four months of 2016 was the period that saw the largest number of applications, an indication of a trend that has seen growth for five consecutive periods. The number of applications peaked in May 2016, with 15 being received.

Figure 4.7 1: Four-monthly trend in applications for Italia Startup Visa



More than half the applications (56%) submitted their projects as part of a business team: a group of individual applicants who planned to form the same company. There was a total of 29 team applications: 19 from 2 people, 4 from teams of 3, and 6 from teams of 4. 24 of the 29 applications were successful, 4 were rejected and one is awaiting assessment. The joint applications had a clearly higher approval rate (more than 85%) compared to the individual projects (64%).

13 applications were also received in relation to an aggregation of existing innovative startups, mainly from Italian nationals. In the other cases, the business plan submitted to the ISV&H Committee involved the formation of a brand-new innovative startup in Italy.

The programme allows an applicant to apply through a certified business incubator: this procedure offers a further simplification, which means that the business plan is not evaluated by the Committee. This procedure was used by 6 applicants: 5 through H-Farm (Roncade, TV) and 1 with Working Capital (Rome).

The applicants are mainly male (93, representing 70.5%), while there were a total of 39 women. The average age of the beneficiaries was 34.9: the youngest was 20 years old on the date of hiring, the oldest 65.

71 applicants said they had previous experience with their own business, with 55 being employed by another company. The professional sectors that were most represented include IT, marketing, management and engineering.

42 candidates have a full five-year degree or equivalent, with another 41 holding a first degree (such as a three-year Bachelor's). 8 have gained a PhD, while 22 hold other types of post-university qualifications, including 16 Master's in Business Administration (MBA). A further 16 have no university qualifications but have gained a vocational training qualification, high school or middle school diploma. The most popular fields of study were IT, management and business

administration, marketing and engineering: with 21 applications, this last was the most represented.

The visa applicants came from 29 different countries. Russia is the country bringing the largest number of applications, with 30 in total (22.7% of the total). 26 of these were accepted (27.7% of the total). The other countries with more than 10 applicants were the USA (18), China, Pakistan and Ukraine (14). No other country submitted more than 5 applications.

Table 4.7.a: Countries of origin of applicants on the Italia Startup Visa programme

COUNTRY OF ORIGIN	NUMBER OF APPLICATIONS	APPLICATIONS ACCEPTED	APPLICATIONS PENDING
RUSSIA	30	26	2
UNITED STATES	18	13	1
CHINA	14	10	0
PAKISTAN	14	3	1
UKRAINE	14	14	0
INDIA	5	1	0
IRAN	4	4	0
BRAZIL	3	3	0
JAPAN	3	3	0
INDONESIA	3	3	0
SOUTH AFRICA	3	3	0
AFGHANISTAN	2	0	0
ARGENTINA	2	1	1
MOLDAVIA	2	2	0
ARMENIA	1	1	0
AUSTRALIA	1	1	0
CANADA	1	1	0
SOUTH KOREA	1	0	0
EGYPT	1	1	0
PHILIPPINES	1	0	0
COMORO ISLANDS	1	0	0
ISRAEL	1	1	0
KOSOVO	1	0	0
LEBANON	1	0	0
NEPAL	1	1	0
NIGERIA	1	0	0

COUNTRY OF ORIGIN	NUMBER OF APPLICATIONS	APPLICATIONS ACCEPTED	APPLICATIONS PENDING
NEW ZEALAND	1	1	0
THAILAND	1	1	0
UZBEKISTAN	1	0	0
TOTAL	**132**	**94**	**5**

Figure 4.7 2: Mapping of applications for Italia Startup Visa

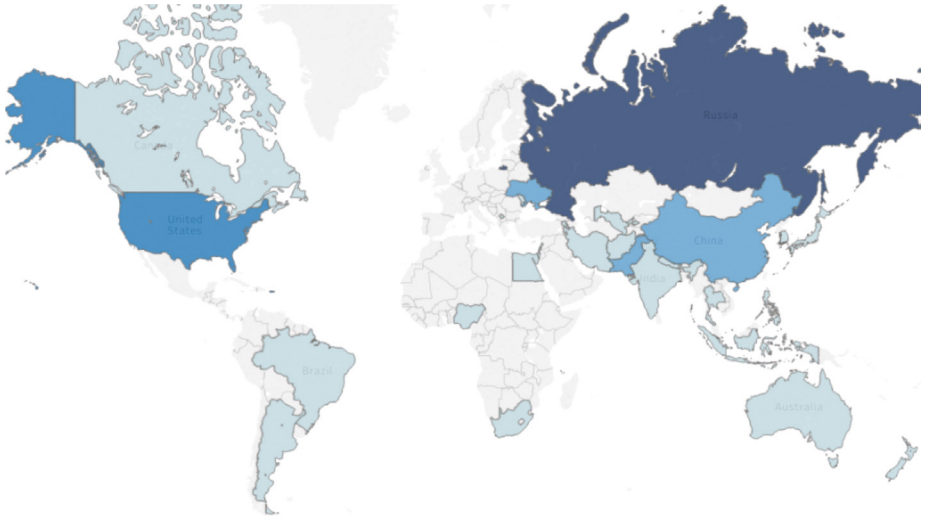
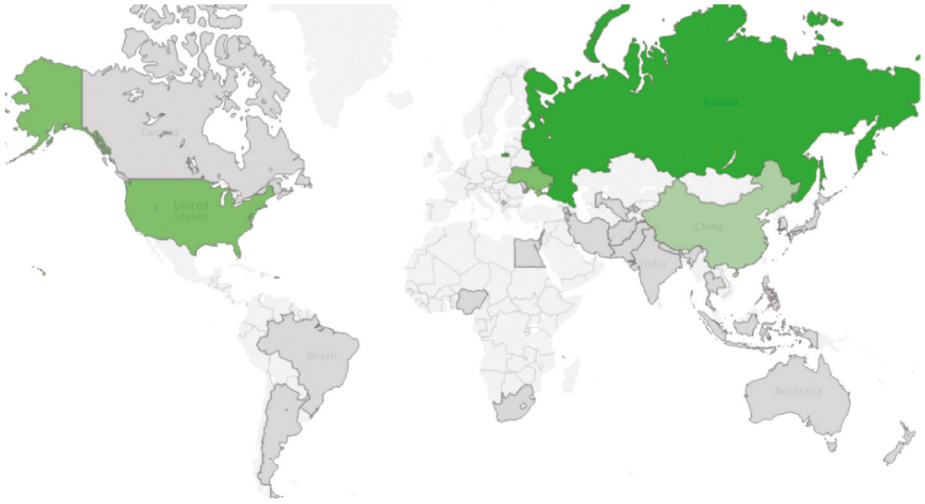


Figure 4.7 3: Mapping of applications accepted for Italia Startup Visa



The 84 startup visa holders were mainly based in Lombardy (34), of which 21 were in the province of Milan and 8 in the province of Varese. 9 chose Rome, while in second place in the regional ranking it was not Lazio (equal third with Veneto) but Piedmont, with 10 applicants from Biella, Turin and Novara. Only three candidates were based in regions of Southern Italy: Abruzzo, Campania and Calabria.

Table 4.7.b: Province of residence chosen by the holders of Italia Startup Hub approvals

PROVINCE	#
Milan	21
Rome	9
Varese	8
Savona	5
Biella, Como, Turin, Treviso	4
Trieste, Verona	3
Bari, Fermo, Florence, Lucca, Novara	2
Brescia, Cosenza, Forlì-Cesena, Massa-Carrara, Padua, Pescara, Salerno, Siena, Vicenza	1

Tabella 4.7.c: Regione di residenza scelta dai detentori di nulla osta Italia Startup Visa

REGION	#
Lombardy	34
Piedmont	10
Lazio, Veneto	9
Liguria	5
Friuli-Venezia Giulia	3
Marche, Puglia, Tuscany	2
Abruzzo, Calabria, Campania, Emilia-Romagna	1

With regard to the new companies, up to now 7 innovative startups have been registered in the special section, and were formed from scratch by the startup visa holders:

- **Generma s.r.l.**: Based in Falerone (FM), formed on 21 April 2016. The company's object is to produce an energy converter driven by wave power.

- **Genuine Education Network s.r.l.**: based in Milan, formed on 11 April 2014. Online platform offering information, services and advice in the food and wine sector.
- **Ital.io s.r.l.s.**, based in Salerno, formed on 5 May 2016. Digital matching service that finds customers for manufacturers of handcrafted, made to measure shoes using a 3D scanning system.
- **LabQuattrocento s.r.l.**, formed in Milan on 29 September 2014. Digital matching service that finds customers for manufacturers of made to measure eyewear using a facial recognition system.
- **Recyclinnova s.r.l.s.**, based in Rende (CS), formed on 28 September 2015. The company researches and develops new experimental ways of converting plastic waste into reusable chemicals.
- **Routes software s.r.l.**, based in Lomazzo (Como), formed on 12 March 2015. Web portal and app featuring travel experiences and alternative tourism.
- **SCdB s.r.l.**, based in San Casciano dei Bagni (Siena) formed on 30 March 2015. Smart metering technologies designed to reduce consumption among large telcom companies.

7 existing startups also recorded the arrival of new, non-EU shareholders with visas to launch an independent startup (**Artemest s.r.l.**; **Lookcast s.r.l.**; **Connexun s.r.l.**; **WalletSaver s.r.l.**; **Portrait Eyewear s.r.l.**; **Warda s.r.l.**; **Argumented Commerce s.r.l.**).

Other examples include three companies already incorporated by startup visa holders still awaiting registration in the special section but now in the expansion phase. Their development is constantly monitored.

#ISVsurvey: aims and results

On 21 April 2016 launched #ISVsurvey, which is based on the #StartupSurvey (see Chapter 3). The aim is to monitor the experiences of the recipients of startup visas. A summary of the survey results, which have previously been for internal use only, will be published in this Report for the first time.

The survey covered the following areas:

1. **Visa**: verify how many approvals have been converted into issued visas, and whether there were any problems in obtaining visa issues through the diplomatic or consular offices;
2. **Permit of stay**: verify how many visas were converted into permits to stay, and whether there were any difficulties with the relevant offices (Post offices and police stations);
3. **Startups**: verify how many innovative startups have been launched, and what were the main issues they faced;
4. **Team**: for joint applications, check whether all the recipients of ISV approvals have actually arrived in Italy;

5. **Family**: check whether family relocation procedures have been completed, and whether any difficulties were encountered;
6. **Network**: check whether, once in Italy, the startup visa recipients have forged relations with the Italian business and professional community;
7. **Support actions**: measure the level of interest in possible seminars on certain topics (corporate law, taxation, startup policies, immigration rights etc).
8. **Policies for innovative startups**: measure the extent to which the recipients of the programme are aware of the Italian Startup Act;
9. **Suggestions**: leave room for the visa holders to give their ideas.

The survey target consisted of 44 respondents who had received their visa approval at least two months before the survey was launched. On 30 April, 62 applications had been successful. From this it is necessary to deduct not only the 13 people who had received the approval less than 2 months before 21 April, but also the 5 individuals who had already renounced the visa.

Detailed replies to the survey were provided by 27 people, two of whom responded jointly (one for two people and one for three people), bringing the total number of survey respondents to 30. Of the remaining 14, indirect information was received from team members, local consultants or by telephone: often these were cases in which the applicants had postponed the relocation or decided not to follow it up.

Main results

Except in a small number of cases, the collection of the visas from consular offices or embassies was usually quick and straightforward. Any problems were usually because the consular staff were initially unfamiliar with the procedures.

The biggest issues arose when it was time to collect the Italian permit of stay for self-employed workers. 14 respondents had not yet received the final document at the time of the survey: this did not include the cases in which no application had yet been submitted, or the only case of renunciation of a visa after having obtained it. Everyone completed the post office visa kit within 8 days of arrival in Italy, as required by the procedures, but they were still awaiting a date for an appointment with the Immigration Office.

Even many of those who had already obtained a permit indicated that this step was problematic: in general, a long time elapsed between the date of application for the permit and the setting of the appointment for digital fingerprinting and collection of the permit: in some cases even several months.

The delay in granting the permit of stay leads to two issues: it affects the applicants' day to day lives in Italy, with regard to logistical issues such as living accommodation or buying a car, and it slows down the launch of the startup. Even if the product or service is usually ready for marketing, it is not possible to set up a company without a permit of stay. Another factor that delays the procedure is family relocation, which can make it difficult for the standard procedure to be completed swiftly.

As mentioned above, there were 7 innovative startups listed in the special section, formed by of startup visa holders. With a very few exceptions, the other respondents said that they still intended to launch a startup in Italy. In some cases they said they were merely waiting to receive the permit of stay, while in others they had financial needs, or the business model had not yet been fully prepared.

Among the main obstacles to doing business in Italy, 13 visa holders indicated the language barrier, 12 the lack of information about laws and regulations, 10 the costs of bureaucracy and 9 the lack of contact with the innovative business community in Italy. In terms of what the visa holders were seeking for their businesses, the majority (17) indicated that they were generally looking for customers and business partners.

There is still fairly limited knowledge of the support measures available under the Italian Startup Act. 13 respondents were aware that they could launch equity crowdfunding campaigns, but only 5 knew of the simplified procedures for the SME Guarantee Fund, even among those who had already set up their business.

In response, MISE in collaboration with Invitalia has prepared a series of themed webinars, which took place in three sessions in September 2016.

Italia Startup Hub

To date, 5 applications have been received for the Italia Startup Hub programme, launched on 23 December 2014. All of these were successful, and led to the conversion of the permit of stay previously held, into a permit for an independent startup. No applications were received during the first eight months of 2016.

The applicants

- The first application was from 2 Korean citizens (one male and one female, 35 and 34 years of age) who were already legitimately in Italy as students (both hold a degree). They want to establish an innovative startup in the tech-fashion sector. They converted the permit to stay into a permit of residence for an independent startup.
- The second case was an Iranian national (age 34, with a full degree), who applied through a certified incubator. Together with a an Italian colleague he had launched an innovative startup to monitor underground energy networks, through the business incubator (Working Capital), **Armnet s.r.l.**
- Another application was made by a US national (38-year-old man with a three-year degree).
- There was another application from an Iranian national, 32-year-old man with a PhD, which was combined with an application for a startup visa, through Italia Startup Visa, made by another Iranian national. The pair have launched an innovative startup concerned with the conversion of waste into chemicals that can be reused in manufacturing processes, **Recyclinnova s.r.l.s.**

Table 4.7.d: Province and region of residence chosen by the holders of Italia Startup Hub approvals

PROVINCE	#	REGION	#
Milan	2	**Lombardy**	2
Sassari	1	**Sardinia**	1
Verbano-Cusio-Ossola	1	**Piedmont**	1
Cosenza	1	**Calabria**	1

4.8 SMART&START ITALIA

As provided for in the MISE decree of 24 September 2014 and the related circular no. 68032 of 10 December 2014, 16 February 2015 was the launch date for Smart&Start Italia, the special subsidised finance programme targeting innovative startups across the country, managed by Invitalia.

The Ministerial Decree and subsequent measures assigned an overall budget of €203 million for this measure, broken down by financial source as follows:

Table 4.8.a: Smart&Start Italia funds

SOURCE OF FUNDING	AMOUNT
Residual funds released from PON SIL 2000-2006 programme	€ 63.525.156,90
Residual funds from FCS Cratere AQ Smart&Start	€ 9.907.747,90
Sustainable growth fund[51]	€ 90,000,000.00
New funds released from PON SIL 2000/2006 programme	€ 40,000,000.00
Total[52]	€ 203.432.904,80

Source: Invitalia

51 The MISE decree of 17 December 2015 increased the initial amount of 70 million by a further €20 million.

52 In addition to the funds listed in the table, the Ministerial Decree of 24 September 2014 allocated the residual PON R&C funds from the "first edition" of Smart&Start, amounting to € 15.145.183,71. However, this provision cannot be used as any projects funded from those resources had to be completed by 31 December 2015. As the MISE Circular no. 68032 of 10 December 2014 set the opening date for receipt of applications on 16 February 2015, the deadline of 31 December 2015 by which the companies should have completed the investments funded with PON finance was not compatible with the period indicated in the decree, for the completion of the investment (24 months from the stipulation of the funding agreement).

In summary, this amount was dedicated to the funding of hi-tech projects from innovative startups relating to the digital economy or research promotion. The projects' expenditure plan must allocate between €100,000 and 1.5 million to investment assets (plant, machinery and technological equipment, hardware and software, patents, licences, know-how, specialist technological expertise) and to operating costs (staff, freelancers, licences and industrial property rights, fast tracking services, rental charges, and interest on external finance).

The finance consists of a zero-rate loan for 70% of the total investment. The special-rate loan can be as high as 80% if the shareholder body is formed of a majority of women or people aged under 36, or Italian PhD holders repatriating from abroad. If the innovative startups are based in a region in Southern Italy (Basilicata, Calabria, Campania, Puglia, Sardinia and Sicily) or in the L'Aquila earthquake zone, 20% of the loan will be granted outright.

This measure also applies to individuals committing to launch an innovative startup within 60 days. Startups formed less than 12 months ago can also benefit from technical and operational tutoring services. Applications from innovative startups agreeing to fund at least 30% of their investment plan with capital from institutional investors will be given a preferential assessment.

In terms of procedure, note that accessing this incentive is paperless, and the application process takes no longer than 60 days.

Much attention has also been paid to issues relating to young business owners accessing credit, as often they have no collateral or personal guarantees. In order to facilitate the investment startup phase, on 28 April 2015, MISE, Invitalia and the Italian Banking Association signed a Convention that enables the beneficiary companies to apply for finance even on the basis of outstanding invoices, through a restricted account[53]. A restricted account is a current account into which the beneficiary company pays only the portion of the purchase price of the goods that is not covered by the incentives: the incentives will be paid by Invitalia after the necessary checks have been carried out. This means that suppliers can be paid quickly, as only the amount paid by the enterprise is anticipated. The use of this facility, which is only available for investment expenses and was initially little known, is gradually becoming more common among beneficiary companies (see the paragraph "Applications for payment").

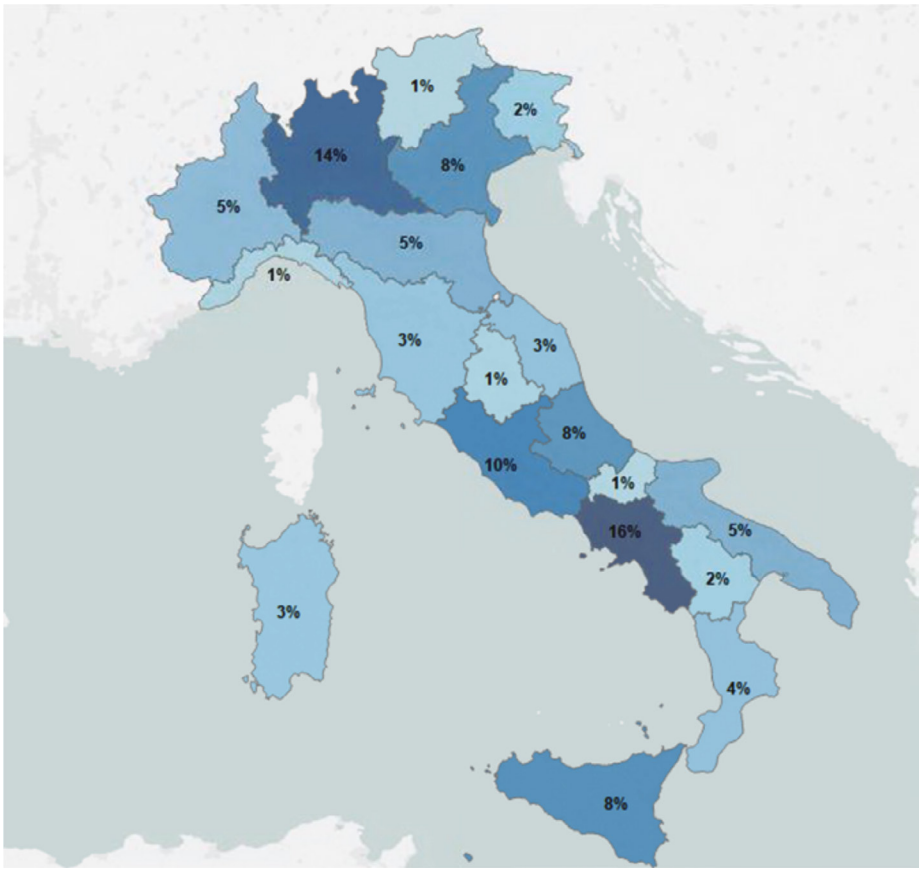
Other than the financial instruments, Invitalia also manages a personalised business creation and startup service, which is intended to strengthen the competitiveness of the target companies. The services offered to companies, which can also be delivered in the form of webinars, relate to specific areas such as relations with risk capital investors, building and publicising the business model, personnel management, project management and the protection of intellectual property.

53 The Directorial Decree of 20 July 2015 of the Directorate General for Incentives to companies of the Ministry of Economic Development regulated the provision of facilities related to the investment programme, concerning the mode of operation of the escrow account created to handle such invoices.

Results on 30 June 2016

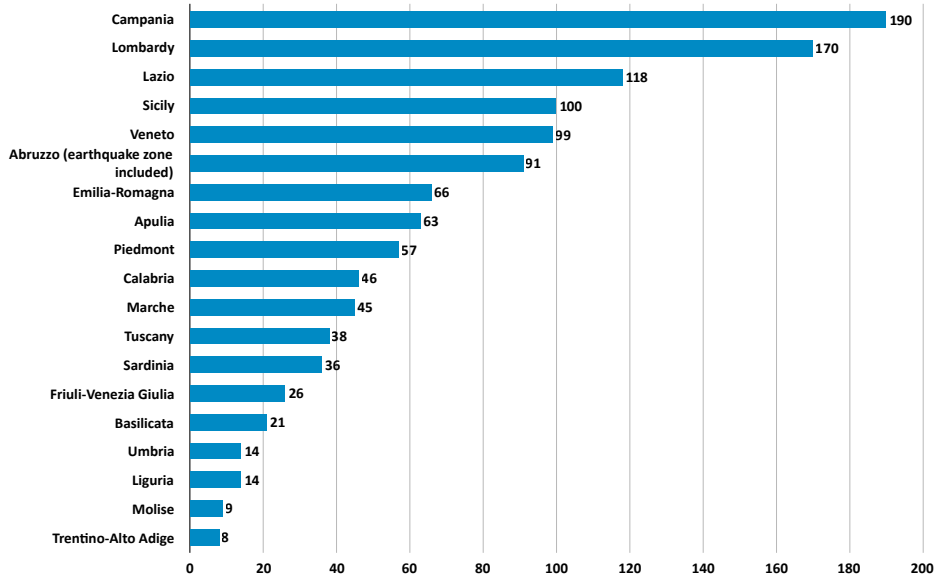
From 16 February 2015 to 30 June 2016, 1,211 requests for subsidies were received. Campania and Lombardy were the most active regions with 16% and 14% of the applications submitted respectively.

Figure 4.8 1: Applications submitted, by region (%)



Source: Invitalia

Figure 4.8 2: Applications submitted, by region (absolute numbers)



Source: Invitalia

Table 4.8.b: Applications submitted, by region (summary)

AREA OF COUNTRY		NO.	%
Centre-North	Abruzzo (including earthquake zone)	91	8%
	Emilia Romagna	66	5%
	Friuli Venezia Giulia	26	2%
	Lazio	118	10%
	Liguria	14	1%
	Lombardy	170	14%
	Marche	45	3%
	Molise	9	1%
	Piedmont	57	5%
	Tuscany	38	3%
	Trentino Alto Adige	8	1%
	Umbria	14	1%
	Veneto	99	8%
	Total Centre-North	**755**	**62%**

South	Basilicata	21	2%
	Calabria	46	4%
	Campania	190	16%
	Puglia	63	5%
	Sardinia	36	3%
	Sicily	100	8%
	Total South	**456**	**38%**
	Total Italy	**1.211**	

Source: Invitalia

52% of applications involved supporting the development of existing innovative startups (businesses already in existence when the applications were submitted).

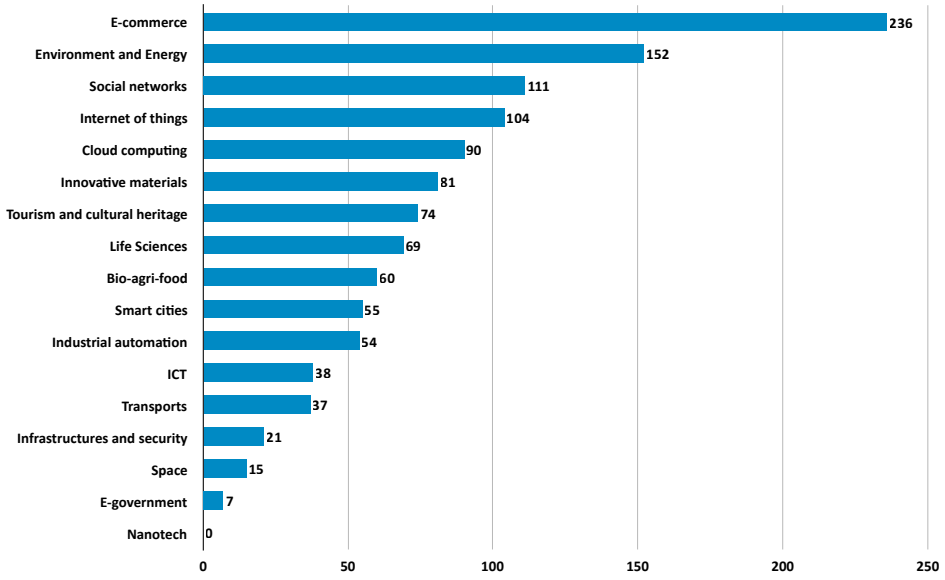
More than €654.6 million of subsidies were requested, and distributed as follows by geographical area:

- Centre-North: 371.1 mln
- South: 244.6 mln
- L'Aquila earthquake zone: 38.9 mln

The applications submitted involved 3,686 people, of whom 20% were female, and covered the following areas of investment:

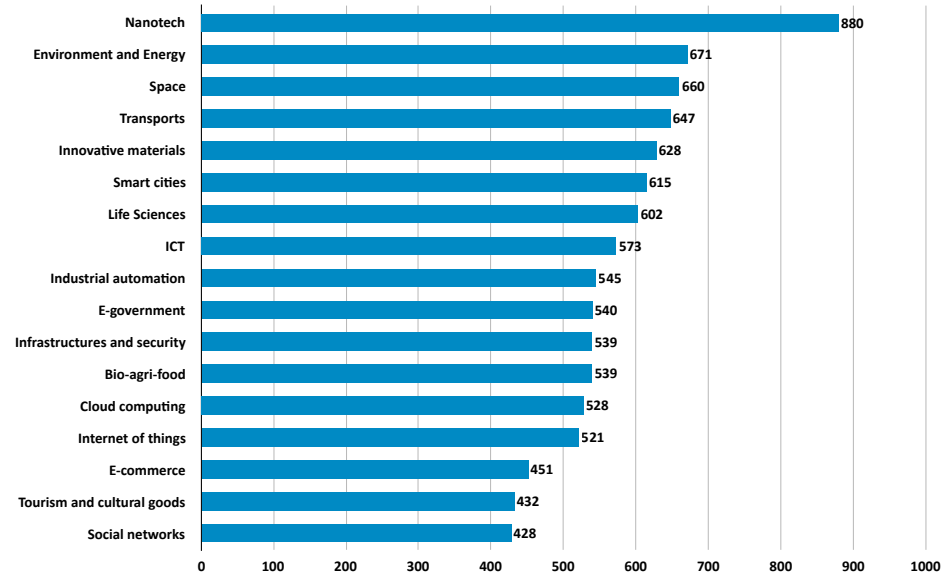
- New/experimental technology: 378
- Development in the digital economy: 729
- Enhancing public and private research: 104

Figure 4.8 3: Applications by field of production



Source: Invitalia

Figure 4.8 4: Average subsidies applied for, by sector of production (Euro thousands)



Source: Invitalia

Table 4.8.c: Progress of applications as of 30 June 2016

PROGRESS OF APPLICATION	REGIONS OF BASILICATA, CALABRIA, CAMPANIA, PUGLIA, SARDINIA AND SICILY	DISTRICTS IN L'AQUILA EARTHQUAKE ZONE	OTHER REGIONS	TOTAL
APPLICATIONS ACCEPTED	77	9	153	239
APPLICATIONS REJECTED	272	25	344	641
PENDING ASSESSMENT	87	17	55	159
APPLICATIONS SUSPENDED[54]	-	-	121	121
DISCONTINUED / LAPSED	20	4	27	51
TOTAL	456	55	700	1,211

Source: Invitalia

On 30 June 2016, 931 applications had been started, of which 239 have already been admitted for the incentives. The 239 applications accepted have activated investments of over 118.5 million euros, and have been allocated incentives (investments and management costs) of 118.2 million, divided by macro-region as follows: Centre-North: 71.3 mln; South: 41.8 mln; L'Aquila earthquake zone: 5.1 mln

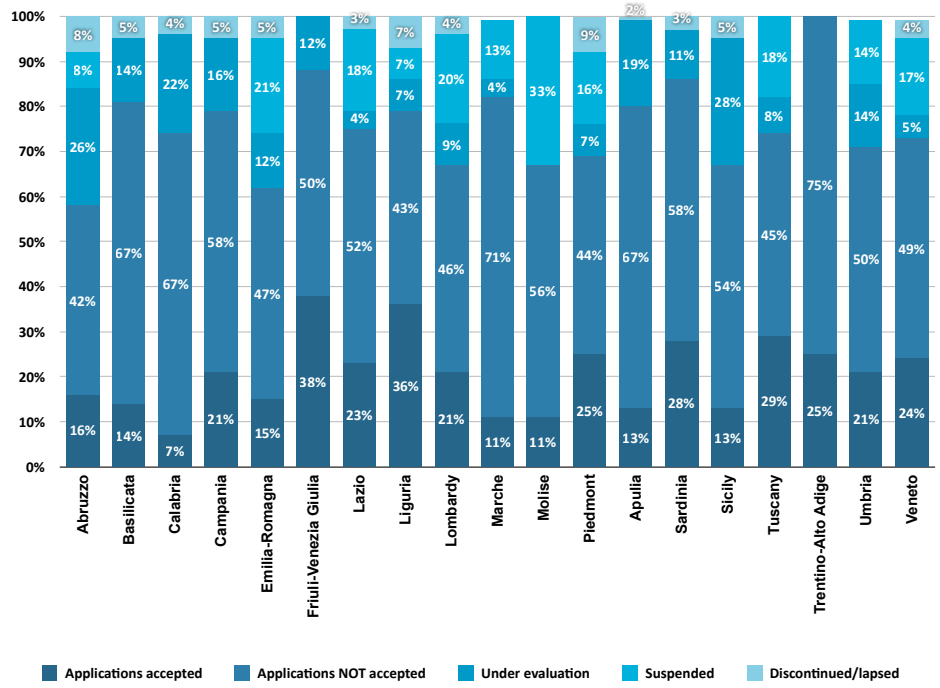
54 The funds allocated to "Smart&Start Italia" for the regions of Abruzzo (except the L'Aquila earthquake zone), Emilia Romagna, Friuli Venezia Giulia, Lazio, Liguria, Lombardy, Marche, Molise, Piedmont, Tuscany, Trentino Alto Adige, Umbria, Valle d'Aosta and Veneto are not enough to cover the potential requirement of the applications received. Invitalia has thus had to suspend the evaluation of surplus applications, as instructed by the Directorate General for Business Incentives (MISE). As further funds become available, Invitalia will restart the evaluation process for applications held in abeyance, according to chronological order of receipt. The suspension of the process does not mean that the Office is closed.

Table 4.8.d: Applications approved, by region

AREA OF COUNTRY		NO.	INCENTIVES GRANTED
Centre-North	Abruzzo (including earthquake zone)	15	€ 8.882.567,52
	Emilia Romagna	10	€ 5.038.192,40
	Friuli Venezia Giulia	10	€ 6.195.262,01
	Lazio	27	€ 10.782.358,35
	Liguria	5	€ 2.058.566,49
	Lombardy	35	€ 17.011.639,61
	Marche	5	€ 1.082.776,00
	Molise	1	€ 181.257,59
	Piedmont	14	€ 5.384.466,63
	Tuscany	11	€ 4.755.350,63
	Trentino Alto Adige	2	€ 1.287.365,22
	Umbria	3	€ 1.028.892,34
	Veneto	24	€ 12.679.881,80
	Total Centre-North:	**162**	**€ 76.368.576,59**
South	Basilicata	3	€ 1.508.995,04
	Calabria	3	€ 1.016.622,50
	Campania	40	€ 20.969.224,99
	Puglia	8	€ 6.752.332,60
	Sardinia	10	€ 3.943.027,53
	Sicily	13	€ 7,648,578.53
		77	**€ 41,838,781.19**
Total Italy		**239**	**€ 118,207,357.78**

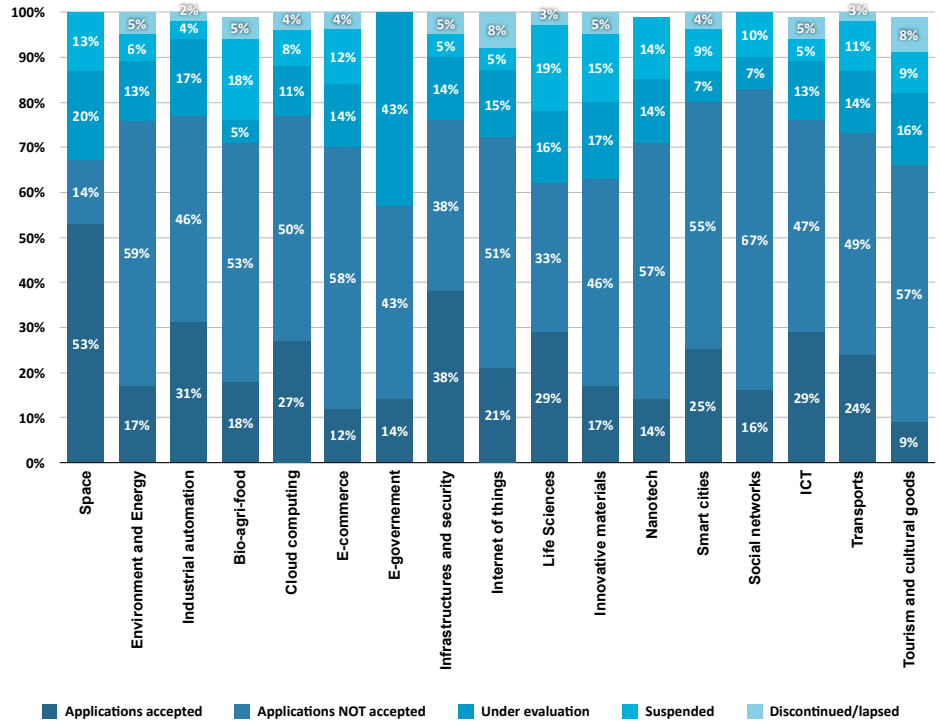
Source: Invitalia

Figure 4.8.5: Rate of application approvals by region



Source: Invitalia

Figure 4.8.6: Rate of application approvals by sector



Source: Invitalia

The 239 innovative startups that have received finance have activated investments in the following 3 areas:

- Product/service innovation: 55.5 mln
- Digital economy: 43.9 million euros
- Research promotion: 19.1 mln

The average investment per company is 496,000 euros.

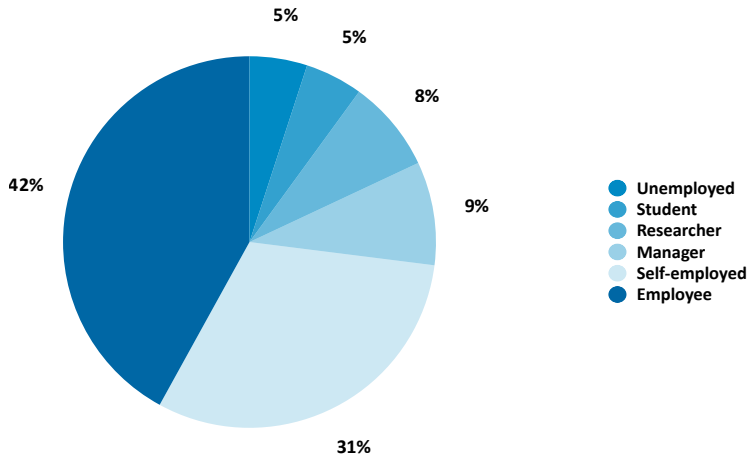
Most of the entrepreneurs are aged between 36 and 50 (45%). The percentage of Under-36's funded by the programme is also significant (27%).

The percentage of female business owners is 17%. This percentage rises to 32% for women who are under 36 years of age. These figures show that women are continuing to experience difficulties in launching a business, but also that the gap is gradually narrowing, as new generations of female entrepreneurs enter the market.

In terms of employment background, more than a third of new business owners come from paid employment: that, on the one hand, demonstrates a strong motivational component, and on the other hand shows the added value in terms of self-employment created by Smart&Start.

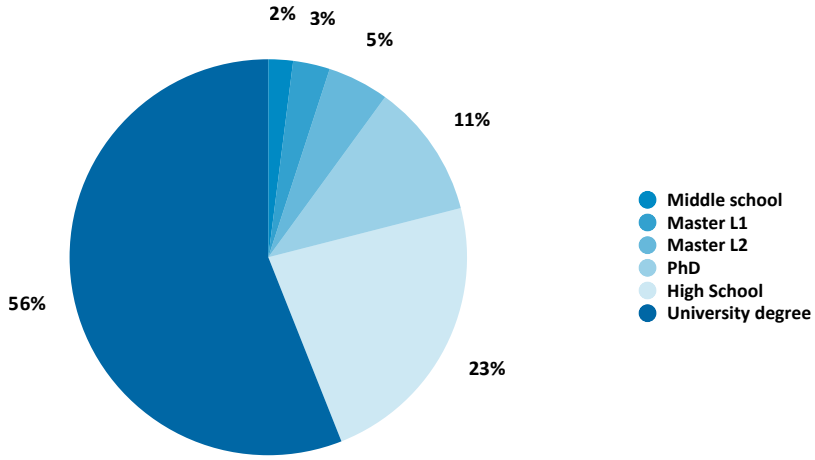
56% of shareholders hold a University degree; 11% hold a PhD. On the other hand, the high level of education among the startup founders reflects the type of business funded.

Figure 4.8 7: Previous employment of business owners



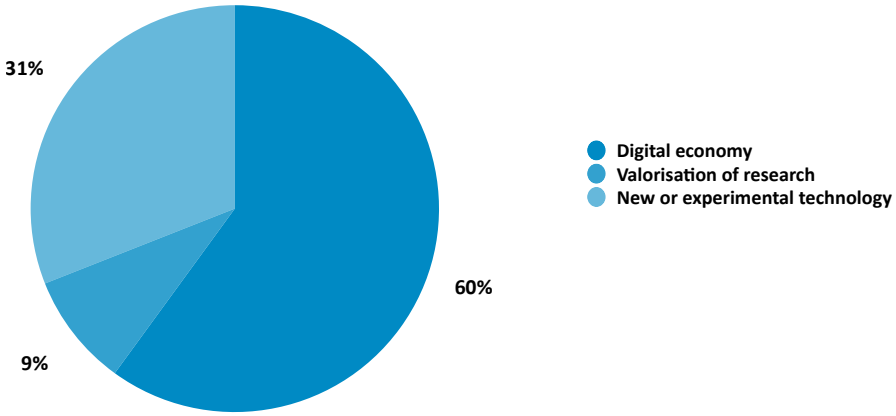
Source: Invitalia

Figure 4.8 8: Business owners' educational qualifications



Source: Invitalia

Figure 4.8 9: Applications submitted according to investment type



Source: Invitalia

After 30 June 2016 and until 31 August, a further 14 applications were admitted, giving an additional total of 7,664,461.04 euros.

Requests for funding

With reference to the progress of the financed projects, up to 30 June 2016, 70 funding requests had been received, as follows:

- 59 requests for funding of investment costs, of which 2 with a restricted current account;
- 11 requests for funding of operating costs.

The total incentives requested during the period ending 30 June 2016 amounted to:

- € 7.054.386,25 on investment costs, of which € 300.700,00 with a restricted current account;
- € 923.636,94 on operating costs.

In the period 1 July - 31 August 2016, the percentage of companies using a restricted account increased considerably. During those two months, 28 funding requests were received, as follows:

- 22 requests for funding of investment costs, of which 6 with a restricted current account;
- 6 requests for funding of operating costs.

The total incentives requested during the period 1 July - 31 August 2016 amounted to:

- € 2,579,973.96 on investment costs, of which € 993,651.70 with a restricted current account;
- € 465,903.08 on operating costs.

Other success stories

Below are the stories of some of the innovative startups that have received Smart&Start Italia funding. The list was compiled by Invitalia, taking into account the innovative nature of the company, any prizes won, its press reputation, the quality and depth of the partnerships it has forged.

Electric Drive Italia s.r.l. (Headquartered in Rome, formed in 2014): The programme involves the design and build of IT platforms and TLC for the remote management and surveillance of electric car charging networks. The most advanced technologies introduced by Electric Drive Italia offer a 22 kWh charge, which gives a range of 150 km in 1 hour and an 80% charge in 30 minutes. The charging points meet high safety standards and can be used safely by anyone, even outdoors and in adverse weather conditions.

Fare Up s.r.l. (Padua, 2015): This startup produces food products using new packaging and conversation techniques for non-refrigerated foods. Fare Up has developed a line of foods containing no preservatives or chemical antioxidants, intended for people who have difficulty in chewing and swallowing. Thanks to an industrial conversion process, the ingredients can be processed without invasive thermal treatment, thus avoiding the use of preservatives or chemical antioxidants.

P2M s.r.l. (Verona, 2012): P2M intends to develop hybrid propellers for the recreational aviation market. The hybrid technology, developed by P2M in partnership with various universities and businesses, and for which a patent application has been filed, gives the aircraft the low consumption of a single-motor aeroplane with the safety of a twin-engine, thanks to a second electric propeller that can assist the main one and takes over in the event of a fault. The

aluminium propellers make the aircraft more efficient, safer and cost effective (it is estimated that it saves around 30% on running costs). They can also improve the environmental impact of air transport.

Moby Health s.r.l. (Sole Shareholder) (Naples, 2013): The "Sustainable Pedestrian Mobility" project is a mobility scooter hire service. Mobility scooters enable people with motor impairment or physical disabilities to travel around places such as shopping centres, retail parks, airports and places with large and/or hard to navigate pedestrian areas.

Oxyda s.r.l. (Naples, 2015): the aim of this project is to radically transform the traditional methods used to process civil and industrial sludge, using a thermo filtration system based on a patented hydrocracking process. This process enables the construction of a thermo filtration system which, without using vaporisation, deconstructs biological sludge into chemically simpler compounds, which makes the industrial processes more efficient and reduces their environmental impact.

HTExplore s.r.l. (Naples, 2013): the company HTExplore has an advanced high throughput screening platform for chemical catalysts, used to produce plastics such as polyethylene and polypropylene. Known as the Parallel Pressure Reactor (PPR48), the platform can complete, in a single day, 48 high pressure reaction experiments, with online control of process variables.

Abinsula s.r.l. (Sassari, 2012): this startup develops intelligent software used in embedded electronic devices such as domestic appliances and on-board vehicle control panels. Compared to other companies in the same industry, Abinsula has produced highly sophisticated software for technology intensive markets such as the automotive industry, and now supplies leading vehicle manufacturers (BMW, GM, Jaguar-Land Rover) and components manufacturers (Bosch, Magneti Marelli).

Mente&Relazioni s.r.l. (Reggio Calabria, 2014): the company designs, develops and tests IT applications used in the treatment of psychological disturbances. By exploiting the potential of augmented reality systems, the therapist can intervene in the process of overcoming phobias, using a device that superimposes the digital image that generates the phobia, over the actual environment. This makes it possible to modulate the exposure to the feared object, which in real life would not be possible.

Morpheos s.r.l. (Catania, 2014): the Morpheos project comes from the idea of making an object behave in a similar way to a living being, making it part of our domestic life: a decorative domestic robot that can interact with its environment. The robot can sense light, sound, smells and vibrations, verbalise language and gestures to the user, and communicates indirectly through an app. It has a robotic dynamic analysis system that can learn, improve and constantly adapt to change in the environment.

Epinova Biotech s.r.l. (Novara, 2011): an academic spin-off of the School of Medicine of East Piedmont University. The main aim of this activity is the research and development of innovative biotechnology solutions for the treatment of damaged skin. The company's activity is based on a patent that covers the synthesis and use of a biocompatible, bioactive matrix (Epigel); it is

currently studying possible extensions of the patent's scope of application, and new patented solutions.

D-Orbit s.r.l. (Milan, 2011): D-Orbit is an innovative startup operating in the space industry. It specialises in developing devices that can find solutions to the problem of space debris orbiting the earth. The main activity is focused on developing an active, intelligent propeller device that can be installed on artificial satellites prior to launch, to ensure that they can be quickly "de-orbited" in a controlled manner, and eliminated, or moved to a "graveyard" orbit at the end of their working life. The aim is to guarantee a sustainable use of space, and to avoid collision with other space devices, and the risk of uncontrolled falls to Earth.

4.9 INVITALIA VENTURES – FONDO ITALIA VENTURE I

Italia Venture I, formed on 29 September 2015, is the alternative reserved closed fund of Invitalia Ventures, the asset management firm controlled by Invitalia. The aim of the Fund is to use its assets to support risk capital investments in SMEs with high growth potential, favouring their capitalisation and expansion over the medium to long term.

Specifically, the Fund can only invest in SMEs, as defined in Annex 1 to Regulation (EC) No. 651/2014, including the innovative startups covered by this report.

The initial fundraising phase which ended on 18 November 2015, saw an initial subscription by Invitalia SpA of €50 million, allocated by the Ministry for Economic Development. The achievement of this first subscription milestone enabled Fondo Italia Venture I in order to launch its investment activity. The Fund has also planned further closing dates, up to 29 September 2017, in order to reach a maximum of €100 million. The first few months of 2016 saw an investment in the capital of three new subscribers:

- Cisco System International, on 29 February 2016, for a total of €5 million;
- Metec Industrial Materials, on 11 April 2016, for a total of €5 million;
- Fondazione di Sardegna, on 10 May 2016, for a total of €5 million.

The total of the Fund on 30 June 2016 was €65 million.

As stated in its Prospectus, the Fund only operates in co-investment with private independent operators, up to a maximum of 70% of each investment round, with a contribution of between 0.5 million and €1.5 million. The Fund and the private independent investors (identified by the asset management firm through a transparent, open procedure) co-invest in the risk capital of the target companies under the same conditions.

The Invitalia Ventures investments committee carries out a preliminary assessment of the individual investment or disinvestment operations, and each subsequent major intervention on the current projects. Its opinion is advisory and not binding, but it is mandatory.

Direct investments may relate to:

- Shares, holdings or certificates representing the risk capital of a company;
- Bonds issued by the company and/or other forms of financial backing, which are usually associated with rights for the conversion into shares or stakes in the capital of the financed company;
- Other participatory financial instruments with conversion rights;
- Other papers or securities that allow the acquisition of the financial instruments referred to above;
- Other debt instruments.

With regard to indirect investments, the Fund can invest in other venture capital funds on condition that they have not, in turn, invested in venture capital firms.

The Fund's main strategic objective is to invest in Italy, with the possibility of dedicating part of the funds to initiatives guided by Italian business owners abroad, which have a positive impact on national production. The sectors of interest are high-growth areas such as ICT, logistics, mechatronics, biotech, health, clean energy and green tech, government and the public administration, social impact and sustainability, food, fashion, lifestyle and fintech.

Since 4 September 2015, Invitalia Ventures has been supported by an investor network whose members include the leading operators of the Italian venture industry, and top international players. As of 30 June 2016 the Investor Network counted more than 100 operators, with total assets under management of around €15 billion, 4000 startups financed and 500 exits completed.

In parallel, the initial collaboration agreements with leading Italian research centres have been agreed, to allow regular access to new, high quality investment proposals.

On 30 June 2016, Fondo Italia Venture I had subscribed to 5 investment operations:

- **D-Eye S.r.l.**
  Innovative startup listed in the Special Section on 29/06/2016

  Agreement completed on 19 January 2016. Invitalia Ventures, together with Innogest SGR, Fondazione Giuseppe e Annamaria Cottino and Si14, the company's current shareholder, invested €1.45 million in the startup, which has developed a patented optical device compatible with the leading smart phones on the market. It can carry out examinations of the retina using the camera and lighting system on the device. D-Eye is set to revolutionise the screening of retina disease, and the follow-up treatment of patients affected by chronic illness, by making it possible to track, share and compare retina images. In addition to this device, the D-Eye solution involves the use of a proprietary app and a cloud platform through which the user can manage the database of images and access the image sharing and analysis features. With this solution, D-Eye is looking to position itself as a landmark in the ophthalmic pathology market.

- **Sardex S.p.A.**
  A former innovative startup, Sardex has now exceeded the 5-year time limit

  Agreement completed on 30 March 2016. Invitalia Ventures, together with Banca Sella Holding S.p.A., Fondazione di Sardegna, Nice Group S.p.A. and Innogest SGR, have invested €3 million in this startup which has developed the first commercial credit circuit in Sardinia. The aim of the circuit is to reconnect local businesses by providing high added value promotional services and offering the island's SMEs payment and credit tools that run in parallel to the traditional circuits. The companies involved finance each other reciprocally, at zero-rate. The wealth remains within the circuit and local producers are prioritised, thus incentivising sustainable development models. Sardex is now exporting its successful model to other Italian regions including Lazio, Marche, Piedmont, Emilia Romagna and Lombardy. In 2015, Sardex recorded sales in excess of 1 million euros, brokering transactions worth in excess of 50 million.

- **Tensive S.r.l.**
  Innovative startup listed in the Special Section on 01/04/2016

  Agreement completed on 20 May 2016. Invitalia Ventures, together with Unicredit S.p.A., has invested €500,000 in this startup, which develops innovative prostheses intended to offer a natural reconstruction of tissues affected by breast cancer surgery. Tensive prostheses are based on a biodegradable synthetic material made with micro channels that facilitate the natural growth of the adipose layer.

- **Zehus S.r.l.**
  Innovative startup listed in the Special Section on 13/05/2016

  Agreement completed on 27 May 2016. Invitalia Ventures, Vittoria Industries, Eldor and the current shareholders have invested €1.5 million in this startup, whose mission is to innovate urban mobility by promoting eco-friendly solutions. This technology represents a new generation of e-bikes: a kit that incorporates a battery, sensors and a motor in the rear wheel hub of a bicycle that requires no charging.

- **Echolight S.p.A.**
  Innovative SME listed in the dedicated section of the Register since 11/01/2016, previously listed in the special section for innovative startups

  Agreement completed on 20 June 2016. Invitalia Ventures and Panakes SGR have invested €4 million in this startup, a spin-off of CNR Lecce, which has industrialised a non-invasive solution to evaluate bone resistance and the early diagnosis of osteoporosis. It is a disruptive solution that can potentially replace the state-of-the-art diagnosis, which is currently based on x-ray technology.

4.10 FONDO ITALIANO D'INVESTIMENTO

Fondo Italiano d'Investimento SGR SpA (FII) was formed in 2010 by the Ministry for the Economy and Finance, Cassa Depositi e Prestiti SpA (CDP), leading Italian banks (UniCredit Group S.p.A, Intesa SanPaolo S.p.A, Banca Monte dei Paschi di Siena S.p.A and ICBPI), Confindustria and the Italian Banking Association (ABI). The aim is to create an institutional and financial investment operator able to provide medium-term support to a large number of medium-sized Italian businesses so that they can compete internationally. In 2012 the investment activity expanded to include venture capital, and therefore to the early stage of business creation. Today, FII manages more than €1.7 billion in funds from its own shareholders and from external investors, destined for investment in Italian companies. It manages 5[55] closed-end private equity and venture capital funds:

- FII UNO Diretti (€720 million) dedicated to direct investments in the risk capital of SMEs operating in industry, commerce and services, to support them throughout the growth process. FII UNO Diretti has invested in 34 Italian SMEs, of which 9 have already been sold, and therefore has a residual portfolio of 25 target companies.
- FOF PE (€388.8 million), a fund of funds dedicated to investments in private equity funds. FOF PE is currently fully invested in a portfolio of 16 private equity funds operating on the Italian market, which mobilise more than €1.8 billion in funds, alongside other investors in the portfolio funds.
- FOF PD (€400 million), a fund of funds for the private debt funds market, launched in 2014. FII has approved the investment in 10 private debt funds, with a focus on the Italian market. Fundraising is still ongoing, with the target set at a commitment of €500 million. CDP has invested €250 million with the remainder coming from external investors including three banks, 3 life assurance companies and 3 pension funds.
- Two funds of funds geared towards venture capital investments:
  - FII Venture (€91.2 million), a fund of funds dedicated to investments in venture capital funds, which is also fully invested in a portfolio of 5 venture capital funds.
  - FOF VC (€80 million), a fund of funds which is also dedicated to investments in venture capital funds. Launched in 2014, FOF VC now has a portfolio of 4 venture capital funds, while a further 2 have already been authorised by FII. Fundraising by FOF VC is still ongoing, with the target set at a commitment of €250 million. This fund of funds is now mainly subscribed by CDP (€50 million) and has attracted other institutional investors including two Italian pension funds.

In 2016, the administrative body of FII was restructured, with Carlo Mammola appointed as managing director, and Innocenzo Cipolletta as President.

55 During 2016, the meeting of members of FII UNO, the first fund set up by FII, authorised the partial proportionate separation of the fund into three specialised subfunds, based on the investment target: a direct private equity fund, a private equity fund of funds and a venture capital fund of funds.

At the same time, the strategic shareholder CDP launched a process to increase its share in the capital[56]. FII plays a significant role in CDP's strategic plan for 2016-2020, also with particular reference to the venture capital operations. In this regard, FII is defining a significant expansion of its current operations in the venture capital sector, through the following strategies:

- Increasing the investment in FOF VC, in order to support the birth of new venture capital operators in Italy and to invest in the new funds managed by operators already supported by FII in the past;
- Creating direct investment schemes for startups, particularly to support the phase of technology transfer from universities and research institutes, the growth acceleration and late stage phases.

In addition, FII's strategic plan also includes the development of investment operations both directly by means of a dedicated fund, and indirectly in other private equity funds for SMEs, in order to support their development, innovation and consolidation in the flagship sectors of Italian industry.

Venture capital funds of funds: investment operations

The Italian venture capital market, although still underdeveloped, offers significant growth prospects, but needs the stable presence of venture capitalists with proven professionals capable of attracting new resources for startups. FII's experience with investment in venture capital funds to date has shown that it is possible to support the birth of new funds. It is therefore a point of reference for the real growth of this market.

The FII strategy for investments in venture capital funds is based on three main elements:

- Selecting investment teams with important, measurable track records, including first-time teams;
- Professionalising the venture capital market in Italy by investing in funds of an adequate size and characterised by a governance based on best international practices;
- Providing proactive support for the creation of funds from the early stages, provided that they are of a high professional standard, as cornerstone investors.

The investment operations, which to date have created a portfolio of 9 venture capital funds[57] together with another 2 currently being formalised, focus on early-stage, Round A and to some extent Round B (growth phase) funds. In this last segment, Italy does not yet have any specialised actors, partly because the funds themselves are not yet large enough; however, as this phase is important

56 CDP currently holds 25% of the capital thanks to the acquisition of the share previously held by the Ministry for the Economy and Finance.

57 Of whom 5 have received investment from FII Venture and 4 from FOF VC

in consolidating the growth of the portfolio companies, also internationally, FII's strategy is designed to increase the average investment commitment in order to generate the domestic growth of solid venture capital operators who can monitor the investee companies in the subsequent rounds, alongside the international investors.

In the majority of cases, FII has also acted as the anchor investor in the target VC funds, by setting up the new management teams, in particular. In other cases, FII's role has been essential in guaranteeing the startup of these funds, and for than enabling them to acquire capital from institutional investors, including international sources such as the European Investment Fund (EIF). Jointly, FII and the EFI have subscribed to a total of €328 million, in active Italian venture capital funds[58].

The table below shows the portfolio funds of FII Venture and FOF VC, including Caravella, which is currently being set up. It is a co-investment vehicle with selected business angels, in partnership with the EFI.

Table 4.10a Funds held and currently being finalised (September 2016)

FUND	FII ROLE	COMMITMENT		TOTAL FUND	NO. OF COMPANIES
		FII (MLN €)	FEI (MLN €)		
FII VENTURE					
360 Capital Partners: the second fund launched by 360 Capital Partners, a manager founded in 2005, whose team has been active in VC for over a decade. **Sector: Tech/ Digital**	FII's intervention was crucial in securing the first closing of the fund in 2012.	10.0	30.0	71.7	22

58 Overall, also including the investments finalised by other FII-managed funds, FII and the EFI have made 19 investments with a total invested capital of €898 million.

Sofinnova Capital VII: The seventh fund managed by Sofinnova Partners, active since the 1970s and one of Europe's first VC operators with a leading position in the healthcare market. **Sector: Biotech**	FII's investment relates to the need to support innovative Italian companies operating in the healthcare sector, by leverage in the expertise and network of Sofinnova.	15.0	40.0	240.0	13
United Ventures: United Ventures is a VC vehicle, resulting from the merger of two teams at Jupiter Venture Capital (P. Gesess and S. Zocchi) and at Annapurna Ventures (M. Magrini and M. Mariani). **Sector: Tech/ Digital**	At the request of FII, the Jupiter and Annapurna team decided to join forces to launch a project of significant size in the Italian VC arena.	15.0	20.0	70.0	17
P101: The only VC on the Italian market, with a particular focus on investing in companies formed and based at leading business incubators in Italy. **Sector: Tech/ Digital**	Given the unique importance of this project, FII acts as a cornerstone investor, playing a proactive role and providing operational support from the kick-off stage.	20.0	20.0	66.3	21
Panakès: VC focused on investments in Italy and in the medtech sector. The key partners are F. Landi (former CEO Esaote), D. Saraceni (ex 360 Capital Partners) and A. Beverina (ex Sofinnova). **Sector: Medtech**	FII supported the creation of Panakes as a sponsor and cornerstone investor.	20.0	20.0	75.1	3
TOTAL		**80.0**	**130.0**	**523.0**	**76**

FUND	FII ROLE	COMMITMENT		TOTAL FUND	NO. OF COMPANIES
		FII (MLN €)	FEI (MLN €)		
FOF VC					
INVESTMENTS HELD					
Innogest (*): Innogest Capital II is the second fund launched by Innogest SGR, which was formed in 2005. **Sector: Medtech / Digital**	FII's intervention will expand the size of the Fund from €49.5 million up to €64.5 million, thus increasing the average investment ticket.	15.0	20.0	84.6	14
Sofinnova Capital VIII: The eighth fund managed by Sofinnova Partners, active since the 1970s and one of the top VC operators in Europe, with a leading position in the healthcare market. **Sector: Biotech**	FII's investment is needed to support innovative Italian enterprises in the healthcare sector, also by leveraging the Italian business accelerator BiovelocITA, funded by Sofinnova Capital VII with €2.4 million in 2015.	10.0	60.0	300.0	4
Oltre Venture: Oltre II is the second fund managed by Oltre Venture, with a focus on impact investing. Oltre Venture is Italy's leading operator in the social VC segment. **Sector: Impact Investing**	FII's intervention has increased the size of the fund and the presence of institutional investors, alongside the EIF, by supporting the growth of the social VC segment in Italy.	3.0	10.0	23.0	2.0

Barcamper: a fund dedicated to startups, mainly in the digital field, starting from the seed and post-seed phases and able to track the companies' growth in the subsequent funding rounds. **Sector: Digital**	FII has supported this project as a sponsor; the first closing date was August 2016.	17.0	-	30.0	-
INVESTMENTS APPROVED AND AWAITING FORMALISATION					
Vertis (**): Vertis Venture 2 Tecnologie is the second VC fund launched and managed by Vertis SGR, with a focus on robotics and digital technology. **Sector: Robotics / Digital**	FII is supporting the project as a sponsor, with the aim of reaching the first closing of €30 mln by the end of 2016.	17.0	tbd	30.5	-
Caravella (**): Caravella is a subfund of a Luxemburg SICAR dedicated to Italian startup investments alongside business angels. **Sector: Generalist through business angels**	FII intends to support the EIF's European programme in countries in which angel investing needs to be developed.	10.0	10.0	20.0	-

TOTAL	**72.0**	**100.0**	**488.1**	**20**
TOTAL FII VENTURE AND FOF VC (***)	**152.0**	**230.0**	**1,011**	**96**

(*) This total also includes €20 mln invested by MISE in IPIGEST.

(**) The total size of the fund corresponds to the minimum amount at the time of the first closing.

(***) The already-finalised investments made by FII and EIF amount to €328 mln.

Source: Fondo Italiano d'Investimento

During 2016, FOF VC increased its funding base with the arrival of new institutional investors who came into the VC asset class only recently, thus recording a positive signal for the market. Specifically:

- Inarcassa, the Italian National Fund for Engineers and Architects, subscribed to the sum of 10 million euros; and
- Cassa Forense subscribed to the sum of 10 million euros, which may rise to 15 million if FOF VC reaches at least 125 million euros.

Following these subscriptions, FOF VC now has funds of 80 million euros. It is expected that when the 250 million euros target is reached, FII will be able to create a significant number of funds in Italy. These resources would activate more than 1 billion euros on the Italian market.

Direct investment: technology transfer and venture capital

In order to strengthen the venture capital chain from the seeding stage through to growth and transformation into startups, FII will play a significant role in at each stage of development: FII will also intervene through direct investment tools supported by CDP as the reference investor. In particular, FII intends to intervene as follows:

- Business creation/technology transfer: FII plans to build up support for Italian startups in the very early stages of development, as the manager of one of multiple investment vehicles that CDP alongside the EFI plan to support on an investment platform dedicated entirely to marketing the results of public/private research in Italy ("ITAtech"). Italy has a number of centres of excellence, including universities and research centres, which high-value generate knowledge and intellectual property but struggle to convert that into a new business. The FII investment vehicle, which is managed by a team of professionals who combine technical/scientific expertise with investment experience, has the aim of creating a network with Italy's main research centres. These will provide a source for high-tech, high potential projects geared towards the creation of startups and spin-offs;
- acceleration: FII intends to support investments in the startup acceleration phase. The project involves the launch of "AccelerateIT", an investment programme promoted by CDP and other institutional investors able to invest in promising startups that have completed mentorship programmes run by selected business accelerators, and which are eligible for special incentives. Within the AccelerateIT programme, FII can act as manager of the financial resources provided by CDP and other private investors. Within Italy, there are private accelerators of national and international standing whose programmes help ideas turn into businesses by investing their own capital and providing coaching designed to prepare the most promising startups for the subsequent phases of development and funding;
- Growth: there are plans to set up a late-stage capital fund, which has the aim of supporting the growth of businesses in the post-startup phase, when they have demonstrated the validity of their business model to the market and

require significant funding (between €5 million and 20 million) to enable their growth, also internationally.

4.11 SME INSTRUMENT - HORIZON 2020

How it works

The SME Instrument Horizon 2020, one of the EU's strategies for growth and development planned for 2014-2020, is aimed at supporting the creation of highly innovative enterprises and increasing their size, through potentially "disruptive" projects with high growth potential. The scheme, which has an endowment of €353.4 million for 2016 and 385.9 for 2017, will have multiple calls annually, in 13 areas (such as open innovation, aerospace, biotechnologies and climate) and consists of three phases:

Phase 1 " Idea to concept" (feasibility analysis, 6 months): this initial phase involves an outright grant of €50,000 which is awarded to all winners in a single payment. The objective is to evaluate the technical feasibility and potential of the innovative business models. The enterprises are offered free technical support days from a consultant, in relation to the development of their business model, the organisation and sourcing of potential collaborations and partnerships.

Phase 2 "Concept to Market-Maturity" (access to the market and R & D, 1-2 years): during this phase the Commission can grant non-repayable co-financing up to 70% of the investment plans needed for the company to develop and test its innovation. The value of the finance ranges between €500,000 and €2.5 million. Activities included in this phase can be the creation of prototypes and scale models, design development, performance audits, testing, demonstrations and the validation of models for market replication. The results that companies should achieve at this stage are the development of a new product, process or service that is competitive in the global market. Also during this phase, the winning company is offered 12 specific coaching days, taking the total to 15.

Phase 3 "Prepare for Market Launch" (marketing): Companies receive support to facilitate the marketing of innovative products and services through networking initiatives, training, coaching and mentoring, as well as access to private capital.

Innovative startups and SMEs can apply for Phase 1 or alternatively apply to subsequent phases if their proposals or business models are at an advanced stage.

The performance of Italian innovative startups

The lack of information regarding the third phase should be noted, as this has not yet been started at a European level.

In June 2016, a total of 344 Italian innovative businesses had benefited from the SME Instrument. Of these, 283 were selected for Phase 1 of the finance granted between 2014 and 2016, whilst 61 obtained access to Phase 2 in the same period. With regard to the reference period of this Annual Report, during

which there were 4 cut-off periods for phase 1 and five for phase 2, 115 Italian SMEs were successful in phase 1, and 36 in phase 2.

At the end of June 2016, 67 of the 344 winning companies were listed in the special section for innovative startups at the time they took part in the procedure. 60 of them were selected for phase 1, and 13 for phase 2: this means that six companies were selected at different times, for both phases:

- **Advanced Microturbines s.r.l.**, www.microturbines.it
  Genoa. Selected for Phase 1 in June 2014 and for Phase 2 in April 2016.
- **Civitanavi Systems s.r.l.**, www.civitanavi.com
  Civitanova Marche (Macerata). Selected for Phase 1 in March 2015 and for Phase 2 in June 2016.
- **D-Orbit s.r.l.**, www.deorbitaldevices.com
  Milan. Selected for Phase 1 in September 2014 and for Phase 2 in September 2015.
- **Eco4Cloud s.r.l.**, www.eco4cloud.com
  Rende (Cosenza). Selected for Phase 1 in December 2014 and for Phase 2 in September 2015.
- **Greenrail s.r.l.**, www.greenrail.it
  Rome. Selected for Phase 1 in September 2014 and for Phase 2 in June 2016.
- **Proxentia s.r.l.**, www.proxentia.com
  Milan. Selected for Phase 1 in June 2014 and for Phase 2 in November 2015.

Compared to the period for the last Annual Report (June 2014-June 2015) there is an almost identical number of innovative startups winning phase 1 (29 from the call in September 2015 compared to 31 in the previous year) and a clear increase in the number of winning startups in phase 2 (12 compared to 1). Therefore a total of 41 innovative startups have been successful in the past 12 months.

Looking at the regional distribution, 33 startups were located in the north of Italy (17 in Lombardy, 5 in Emilia Romagna and Piedmont, 3 in Trentino-Alto Adige, 2 in Veneto and Liguria and 1 in Friuli-Venezia Giulia), 17 in central Italy (7 in Tuscany, 6 in Lazio, 4 in Marche), 16 in the South and Islands (6 in Calabria, 3 in Campania and Sicily, 2 in Puglia, 1 in Sardinia and 1 in Abruzzo). At provincial level, the most represented cities after Milan (14) were (equally) Rome, Turin and Cosenza (5, thanks to the innovative startups based at the University of Calabria in Rende).

In terms of macro sector distribution, all the companies operate in the service sector (46) or in manufacturing (21). The Ateco code for 20 of them was M 72 " Scientific research and development", for another 12, code J 62 "Software production and IT consulting"; of those in the manufacturing sector the most-represented was C 26 " Manufacturing of computers, electronics and optical products" (5 cases).

At the time this report went to press, 63 of these companies were still innovative startups – one was in liquidation – and one had transitioned to an innovative SME. Of those that had filed financial statements as of 30 June 2016, 32 had a value of production of less than €100,000, 21 between 100,000 and €500,000,

3 between 500,000 and 1,000,000, and 3 were "millionaire startups", with a production of between €2 and €5 million. The figures on workforce (relating to the open national insurance positions) were available for 42 startups and are distributed as follows: 28 innovative startups have between 0 and 4 employees, 8 of them have between 5 and 9, 3 from 10 to 19, while 3 companies have between 20 and 49 members of staff.

Of the 67 successful innovative startups, 4 were established in 2015, 26 in 2014, 16 in 2013, 11 in 2012, 5 in 2011, 4 in 2010 and 1 in 2009.

4.12 CONTAMINATION LAB

The Contamination Labs are based on a proposal contained in the "Restart, Italia!" report. The policy, produced early in 2013 by MISE and the Ministry for Education, Universities and Research (MIUR) is intended to expose university students studying technical or humanities subjects, to a stimulating environment in which they can develop innovative business projects. On a broader level it is also designed to foster a culture of entrepreneurialism and innovation.

CLabs are rather similar to clubs, in that people from different disciplinary backgrounds, but with a shared interest, come together informally in order to work on an innovative business project. The process of hybridisation or "contamination" can diversify and strengthen the members' knowledge as they feed into a pool of skills that can help to create new, innovative businesses with high intensity of human capital.

The exchange of know-how, which is a core element of the project, relates not only to students from different disciplines, but also the lecturers themselves who can acquire valuable information from their peers and students from other areas. The collaboration of lecturers from a variety of backgrounds: the world of manufacturing, public institutions and the tertiary sector, introduces an essential element of "hybridisation" of knowledge, by bringing their knowledge into the universities.

Following the publication of MIUR's "Bando Startup" on 13 March 2013, a budget of 1 million euros was earmarked for the creation of Contamination Labs at the Universities in the Convergence regions identified in the EU programme for 2007-2013: Campania, Puglia, Calabria and Sicily. The winners of the competition were the University of the Mediterranean in Reggio Calabria, the University of Calabria in Cosenza, the University of Catania and the University of Naples "Federico II". The four CLabs started operating in 2014, with the last cycle completed by 30 June 2016, which was the programme end date.

Along with the four CLabs formed as a result of the MIUR competition, another 4 projects were funded by the universities themselves: Cagliari, Trento, Catholic University of the Sacred Heart (Milan campus) and the Polytechnic of Marche (Ancona). The work of these new CLabs (the "extra-MIUR" labs) is presented in this Annual Report for the first time this year.

Section 2.2 of the National Programme for Research 2015-2020, published by MIUR on 2 May 2016, contains plans for the extension of the Contamination Lab

project. The intention to repeat this experimental learning project was publicly announced at the Contamination Lab Italia day, hosted by CLab Naples on 24 May 2016. On 2 December, MIUR followed up that announcement by publishing the new Contamination Lab competition.

Non-MIUR Contamination Labs

Cagliari: the CLab at the University of Cagliari has a six-month activity cycle based on the three closely interconnected modules. The process is sequential and selective, leading participants through an exploration of the main topics of innovative business ("Know your context"), and then investigates the methods used to plan the development of the startups, also in contact with the players in the local ecosystem such as the certified incubator The Net Value ("Know your business") and finally a self-assessment of what has been learned with the ("Skills report"). No fewer than 22 of the innovative business ideas developed at the CLab have been converted into innovative startups or are still active. They received national and international recognition as well as more than €500,000 in investment. The pride and joy of this CLab is the structured results appraisal process which incorporates both ex-ante and ex-post analysis, the creation of a control sample and a subsequent follow-up, six months after completion of the process.

Trento: The CLab at the University of Trento, which is open to all students as co-working spaces, provides for the possibility of participating in a variety of training programmes and intensive activities structured in two formats. The first is called "Startup Lab": the students involved, who come from various departments of the University, are divided into teams of entrepreneurs each tasked with developing an innovative business idea: during the semester, the participants attend "learning by doing" sessions assisted by locally-based mentors. After completing the course, the students' projects are assessed by a panel of national and international experts. The second format, the "Innovation Olympics", takes the form of a corporate challenge. Mature students ask teams of students to prepare business plans. When they have identified an area, they are then asked to produce specific business cases to propose to the client company. The initial theoretical programme is complemented with real exercises that bring students into contact with the business community.

Milan (UniCatt): the "ConLab" at the Catholic University of Milan differs from the other CLabs in various respects. The participants on the first training cycle (February-July 2016) were admitted on the basis of innovative business projects which they were required to plan and present previously. The training activities are not predetermined, but are tailored to the teams' requirements in each case, with the help of UniCatt lecturers and other professional figures. The teams are regularly briefed on developments in the Milan startup community and are asked to attend events organised by the entrepreneurial ecosystem, also from further afield.

Ancona: The activities of the CLab at the Polytechnic of Marche take place during the academic year, based on weekly modules delivered by mentors from

the business world. They are open to students from any background. One of the distinctive characteristics of this CLab is the annual structured networking event with members of the innovation ecosystem including The Hive and JCube (certified incubators), and a series of special interest events. Managed by the University's Industrial Licence Office, CLab Ancona has a strong focus on technology transfer, as its scientific coordination is the responsibility of the Centre for Innovation and Entrepreneurship. The CLab premises are also open to other local stakeholders who can arrange conferences, workshops and seminars, also for the benefit of university students.

MUIR Contamination Labs

Cosenza: The CLab at the University of Calabria completed its fourth successive monthly cycle in June 2016. Based at the Arcavacata campus in Rende, CLab Cosenza will benefit from the proximity of the university incubator Technest. The activities are organised in three phases: "CLab Gym", a training facility open to all participants; "CLab Challenge", a tutoring service for the top 10 teams lasting 1-3 months which ends with a contest judged by an external jury; the optional "CLab Follow-up", which is reserved for anyone who wants to continue their business idea and develop it for the market. CLab Cosenza has put forward the "European Contamination Lab" proposal, which will be part of the Erasmus+ programme, and has organised a "Startup Super School" for students of local high schools.

Reggio Calabria: During the Report period, the CLab at the University of Reggio Calabria held its third and fourth cycles. Apart from the usual innovation training and mentoring, this CLab also offers an intensive three-day workshop during the early stages of the programme. The first day is spent outdoors, on essential teambuilding exercises. CLab has also been involved in a number of local projects: StartCup Calabria 2016, which also featured ideas taken from the CLab, a European Maker Week and the Startup Europe Awards in Calabria. A major "extra-territorial" partnership was launched with I3P, a certified innovative startup incubator at the Polytechnic of Turin.

Naples: during the course of its three six-monthly cycles, the CLab at the Federico II University of Naples offered a training course based on four core modules to engage students from all disciplines to engage with the topics and vocabulary of the startup world. One such module incorporates a 200-hour apprenticeship with partner companies, which helps to strengthen the bonds between the academic laboratory and the business community. The special feature of this CLab is its "Contamination Lab Toolkit", which consists of devices to monitor the classroom work and the evolution of the students' business projects. The premises are open to C-Labbers from previous years who can use them as co-working spaces while sharing their experiences and methods with the current participants. Another distinctive element of CLab Naples is the broad range of networking activities involving local business associations, the municipality, regional government, businesses and the local media. The communication and promotional activities have been particularly intensive, taking the form of an online presence, radio broadcasting and the traditional press culminating in a

commercial broadcast in collaboration with the Naples Metropolitan Railway. Finally, CLab Naples hosted Contamination Lab Italia on 24 May 2016, designed to create a link with other innovative "Bando MIUR" and non-MIUR businesses.

Catania: From the third edition, the activities of CLab Catania covered a period of one year. In the first two editions, the six-month cycle was divided into a basic programme of two and a half months which focused on acquiring the skills essential for the new world of innovative business, followed by a specialisation course of three and a half months. The interdisciplinary teams were not formed at the start, but at the end of the basic programme: during the specialisation process the teams were supported by tutors with scientific or technological skills depending on the idea they were working on. CLab Catania has forged partnerships with major local stakeholders: public institutions, technology parks, industrial associations and the public – and has cooperated with international stakeholders from Croatia and Germany in helping to define HYPE, a new educational programme on the creation of cooperative businesses.

Table 4.12.a: Students participating in the CLab, winners of the MIUR competition

	1ST CYCLE	2ND CYCLE	3RD CYCLE	4TH CYCLE	TOTAL
CLab Cosenza	74 (106)	84 (113)	64 (77)	78 (86)	**300 (382)**
CLab Reggio Calabria	36 (36)	39 (39)	42 (89)	40 (85)	**117 (164)**
CLab Naples	35 (37)	48 (99)	30 (50)	-	**113 (186)**
CLab Catania	30 (127)	35 (74)	40 (160)	-	**105 (361)**
Total	**175 (306)**	**206 (325)**	**176 (376)**	**118 (171)**	**635 (1.093)**

Source: based on CLab data

Table 4.12.b: Business projects developed at the CLabs, winners of the MIUR competition

NUMBER AND TYPE OF BUSINESS PROJECTS	FINAL CYCLE*			
	NA	CS	RC	CT
Number of projects initiated	6	4 (8)	6	5
Number of technology-oriented projects	4	4 (8)	1	5
Number of projects with a social goal	2	0 (0)	1	0
Number of projects expected to result in a company being set up within 6 months of the end of the CLab cycle	6	0 (1)	1	3

**For NA and RC the figures refer to the third cycle, for CS to the third (and fourth) cycles, and for CT to the second cycle.*

Source: based on CLab data

Table 4.12.c: Projects developed by CLab participants

MIUR COMPETITION			
CLAB	**NAME OF PROJECT**	**WEBSITE**	**DESCRIPTION**
Cosenza	CHeArtLab		Developed by three Earth sciences PhD students, this programme is designed to promote cultural heritage by creating participating museums in which visitors can recreate the works of art on display (urns of ancient Greece, mortars of ancient Rome, the pigment from a 17th-century painting etc.).
	Inside Job		Inside Job is an innovative marketplace for first-time jobseekers. It offers a system of customised services for applicants and companies, including visual CVs, aptitude tests, remote simulations of job interviews and an extensive feedback system. The team is made up of three students and graduates in law, economics and IT.
Reggio Calabria	Coltiva il tuo cibo	http://coltivailtuocibo.com	A proposal for a multimedia website that customers can use to buy fresh local produce of their choice, by adopting a plot of land cultivated by a local smallholding.
	Easylife	http://goo.gl/Z8A8ZW	The aim of the project is to develop a wearable device for epilepsy sufferers. The device uses biometric and environmental sensors to detect the person's state of health and predict epileptic fits.
Naples	Vascitour	http://www.vascitour.it	A site that offers experience tours of Naples, bringing tourists into contact with the people of the city and giving them a taste of the real Naples. Each tour is customised to suit the guests' preferences. The startup was formed as a cooperative in May 2016.
	RepairCafè Napoli	http://www.repaircafenapoli.it/	A collective workshop where old objects are repaired. The initiative promotes DIY culture and circular economy dynamics. It also offers opportunities for socialization and networking based on knowledge-sharing. The team has launched a crowdfunding campaign, and routinely organizes seminars and other events on physical and digital reparation.

MIUR COMPETITION			
CLAB	**NAME OF PROJECT**	**WEBSITE**	**DESCRIPTION**
Catania	Organic Energy		The project is based on the use of small-scale anaerobic digestion plants, designed for densely populated areas, in order to reuse urban food waste. Recycled food waste can be used in the production of electricity, biogas and digestate, which can be used to produce bio plastics and biopolymers.
	FyDO: Find Your Dog	http://fydo.eu.pn/	This idea involves the development of a special dog collar which can transmit the animal's position to an app, up to 50-70 m away. If the dog is lost, the owner can alert a community of users who can help them in the search.

NON-MIUR			
CLAB	**NAME OF PROJECT**	**WEBSITE**	**DESCRIPTION**
Ancona	ClubUp	https://clubup.it/home	A "sport-network", which is based on an online platform and smart phone app, currently being tested. The aim of this social network is to facilitate recruitment and visibility on the market for transfers and sponsorships, for amateur sports people and clubs. Both the platform and the app are currently in the test phase.
	MedUp		A smart phone/tablet app that helps doctors select the correct dosage for patients with kidney failure. The service is currently being tested at the Torrette hospital in Ancona.

NON-MIUR			
CLAB	NAME OF PROJECT	WEBSITE	DESCRIPTION
Cagliari	Intendime	http://intendi.me/it	This system helps anyone with hearing problems to sense noise in the environment, using a technology that picks up the vibrations that generate sound. Intendime has won a series of awards and national and international recognition, including the National Prize for Innovation.
	Nausdream	https://www.nausdream.com/	A peer-to-peer marketplace that allows boat owners to share their vessels, for payment. Nausdream has raised approximately €200,000 from private investors and venture capitalists.
	Yenetics	http://yenetics.com/	An innovative, non-invasive test for the world's most common 100 genetic diseases (compared to the 15 tested by competitors). Winner of the third edition of CLab UniCa. In July 2016 it also won the international Tel Aviv Startup BootCamp prize for the best innovative startup.
Milano UniCatt	HEGO	http://www.hego.it/	This startup, formed in May 2016, offers a video recording service for amateur sporting events using special cameras. The images are automatically uploaded onto an online portal. The players can then review the match, see their performance data and edit the video before sharing it on the social networks.
	UpConscious	https://www.f6s.com/upconscious/about	The project involves the creation of an Italian-made women's clothing brand based on the idea of corporate social responsibility and upcycling: all the garments are made using end-of-life fabric.

NON-MIUR			
CLAB	**NAME OF PROJECT**	**WEBSITE**	**DESCRIPTION**
Trento	AlpsUP	https://www.f6s.com/prova99	The company, founded by an architect, produces "innovative bivouacs": temporary mountain camps, which are connected on a social network. It has already made and sold the first camp.
	Friends of Deaf	https://friendsofdeaf.wordpress.com/	The project involves the development of an app to help deaf people to drive a car by decoding acoustic signals that they would otherwise find it hard to perceive. Winner of SW BZ 2015 and the Demo Day at Startup Lab 2016, it also gained entry to the final of the 2016 Virginia Tech KW.

5 INSTITUTIONAL COMMUNICATION: A MATTER OF TRUST BETWEEN THE PUBLIC ADMINISTRATION AND THE CITIZENS

5.1 A BILINGUAL INFORMATION STRATEGY: SUMMARIES, SLIDES AND GUIDES IN ITALIAN AND ENGLISH

An important part of MISE's activity connected to its policies for startups and innovative SMEs is the provision of regularly updated promotional information, accessible to everyone. In many cases, these documents are similar to "Frequently Asked Questions" (see par. 5.2): all the guides deal with important aspects of particular interest to people considering an innovative startup for the first time, and also is also useful for experts in the field as it provides them with a practical alternative to the direct consultation of regulatory texts and official interpretations (see par 5.3). With a view to promoting the internationalisation of the Italian business community and to make the regulations compensable not only to Italians but also to an international public, the documents are usually translated into English and kept up to date alongside the Italian version.

The key information document is the summary of the regulations on innovative startups (text in Italian, text in English: last updated 2 May 2016). The summary sheet provides the ideal starting point for anyone looking to find out about the key elements of the policy: how it came into being (p. 3-4), the legal definition, obligations and opportunities tied to the rules on publicity (p. 5-8) and a concise but comprehensive presentation of all the incentives available under the Italian Startup Act (p. 9-13). There is also a brief description of some of the additional schemes available under different laws other than the 2.0 Growth 2.0 Decree 2012 and the 2015 Investment Compact, but these relate exclusively or predominantly to new innovative businesses: the Smart&Start Italia funding scheme (www.smartstart.invitalia.it), the special policies for permits of stay and visas - Italia Startup Visa and Italia Startup Hub (italiastartupvisa.mise.gov.it), reserved for non-EU entrepreneurs intending to start an innovative enterprise in Italy, the University-linked Contamination Lab programme which is the result of a collaboration between MIUR and MISE designed to Foster and entrepreneurial culture in the academic community and to policies that are open to all types of business but are particularly important for those in innovative fields: the R&D tax credit and the Patent Box.

The information given above in relation to innovative startups also applies to innovative SMEs. There is also a summary sheet for SMEs (text in Italian¸ text in English: last updated 26 May 2016), and this contains the same type of information as that provided for startups: the purposes of the policy, definition of an innovative SME, how to become one, and the main incentives and benefits available to them.

To make the summary sheet even easier to use, a set of accompanying slides covers the key points: background, eligibility criteria and incentives offered. The graphics have been carefully designed in order to be user-friendly and were prepared in collaboration with Invitalia, as part of their joint work on the Easitaly Roadshow (see par. 5.7). This material is also available in two languages, Italian (**startups** – **SMEs**) and English (**startups** – **SMEs**).

The result of a collaboration between MISE and Invitalia, the Guide to incentives for innovative startups and SMEs condenses the summary sheets into a single document and was handed out at the roadshow venues mentioned above. The PDF version can be downloaded from the Invitalia website (download).

As mentioned, the main purpose of the summary sheets is to introduce people to the vast and complex body of information available in support of innovative entrepreneurship. One of the main task is to direct the public towards the primary sources of information and other more in-depth documents published for specific topics. These include the following informative documents, which were published during the Report period:

- Summary sheet on R&D Tax Credit (text), valid for the period 2015-2019 and published on 31 March 2016. The text contains detailed information about the potential beneficiaries, the types of investment covered by the incentive, the methods used to calculate the total tax credit, the conditions and procedure followed.
- Information on simplified access to the SME Guarantee Fund, for innovative SMEs (text), published on 24 May 2016. The document provides key information about how the Fund operates, the eligibility requirements, the characteristics that differentiate innovative SMEs from traditional ones and the difference compared to innovative startups, for which specific information is already available (text).
- Instructions on how to use #ItalyFrontiers (text), the service provided by InfoCamere which converts the information available in the special section on the Business Register into a showcase for businesses, where the innovative companies can display their own bilingual public profile that can be customised to increase their visibility to potential customers and investors. The dedicated Guide targeting both innovative startups and SMEs, was published on 12 January 2016.

Documents that are less recent but still valid, such as the guidelines on how to register in the Special Section and related criteria (startups, SMEs) and innovative social startups (Guide), produced in collaboration with the Chamber of Commerce network, can be found in the relevant sections of the MISE website for innovative startups and SMEs:

- **Innovative startups**: http://www.mise.gov.it/index.php/it/impresa/competitivita-e-nuove-imprese/start-up-innovative
- **Innovative SMEs:** http://www.mise.gov.it/index.php/it/impresa/piccole-e-medie-imprese/pmi-innovative

5.2 DIRECT, TARGETED COMMUNICATIONS: NEWSLETTERS AND THE "HUNT FOR STARTUPS"

Like any company listed on the Business Register, innovative startups and SMEs have a certified email address which is a privileged channel of communication between the user and the public administration. Following what is now a well-established practice, also during this Report period, the Directorate General for Industrial Policy, Competitiveness and SMEs has used this tool on various occasions to reduce the inevitable shortfall of information generated by the constantly-evolving, selective legislative framework by sending innovative startups and SMEs summaries of the latest policy developments in the form of a newsletter.

2016 saw a mass mailing of two general newsletters:

- The first, dated 11 March 2016 was aimed at innovative startups. The document was received by all of the 5200 companies listed in the special section on that date, and focused on four points:
  1. The announcement that the incentives for investments in innovative startups would be extended for the whole of 2016 and informed the readers of the main changes introduced by the interministerial implementing decree – the raising of the eligible investment threshold up to €15 million over five years, the extension of the mandatory holding period from 2 to 3 years, and a simplification of the grounds for disqualification from the incentive;
  2. An introduction of the #StartupSurvey (see Chapter 4), the survey carried out by MISE and Istat on the ecosystem of innovative startups, outlining the reasons for the survey and the issues it covers – human capital and social mobility, financial trends, types of innovation, knowledge of and satisfaction with the policy;
  3. A presentation of the amendments made to Consob's regulation on equity crowdfunding, dated 24 February 2016 aimed at simplifying the procedure for sourcing capital, reducing costs and expanding the population of potential professional investors (to include new categories such as business angels);
  4. promotes #ItalyFrontiers (see par. 5.6), presenting the opportunities in terms of promotion and profile-raising.
- The second was dated 31 May 2016 and was addressed to innovative SMEs. This newsletter also contained four points, some of which dovetailed with the previous newsletter:
  1. It informed businesses of the entry into force, following publication in the Official Gazette of the Ministerial Decree of 23 March 2016, of the procedure for simplified access to the SME Guarantee Fund for the benefit of innovative SMEs as well. The procedure, which to some extent differs from the one available for startups, is discussed in a Guide published by MISE on its website;
  2. Updates on the new regulations on equity crowdfunding, which apply both to innovative startups and to innovative SMEs (see above);

3. Describes the procedure for accessing #ItalyFrontiers;
4. Announced the publication of the updated summary sheet (Italian and English) describing the incentives available to innovative SMEs.

The Report period also saw the release of a series of specific newsletters, which explore individual topics of particular importance.

- 24 September 2015: newsletter on the updating and simplification of the procedure for the recognition of innovative social startups.
- 6 October 2015: a newsletter was sent out by certified email, specifically targeting the 162 innovative startups that will automatically be removed from the Special Section after having reached the time limit on 18 December 2015. These mature startups were also offered the opportunity of transferring to innovative SME status, which has no time limit criterion. A similar newsletter was sent out on 10 October 2016 to the 820 innovative startups expiring on 18 December 2016.
- 11 November 2015: to mark the launch of #ItalyFrontiers, a dedicated newsletter was sent out to all the innovative startups and SMEs registered at that time. The newsletter described the procedure for accessing the platform, and how to use it.
- Two newsletters were sent out a month apart, 16 May and 16 June 2016, on the #StartupSurvey. The May newsletter was a reminder to any companies that have not yet replied to the survey, and provided more information about the purpose of the forms and how to complete them. The June newsletter, which was sent out when the survey had concluded, was an email to thank the 2,250 startups that took part in the survey. This number reflected more than 40% of the target population, and was more than acceptable for a voluntary survey.

Another two newsletters merit particular attention. While all the others were addressed to companies already listed in the special section and related to aspects of the regulations that they already benefited from, these two newsletters targeted companies who were not recipients of the special incentives but potentially met the eligibility criteria.

It is possible – and this was partially confirmed by the results of the survey – that many innovative businesses not listed on the special sections of the register have not taken up this opportunity because they were not aware that they met the legal definition of innovative startup or innovative SME or, which is more likely, because they were unaware of the contents of the legislative measures available for innovative business.

With the collaboration of InfoCamere, the company in the Chamber of Commerce system responsible for managing the IT side of the Business Register, it was possible to extract information about the population of potential innovative startups and potential innovative SMEs, using a filter based on compliance with the legal requirements. The criteria include the status of joint-stock company, date of formation, total turnover, absence of any connection with the demerger or sale of a company or business unit, and the ownership of intellectual property used in the company's activity. These are only some of the

innovation requirements stipulated in the regulations: many of them cannot be unequivocally identified – such as the innovative content of the company object – or they do not correspond to a specific item on the financial statements held by the Chamber of Commerce – such as the number of highly qualified personnel. The result of the search does not give a population that is completely identical to that of the innovative startups or SMEs: however the businesses are at least in part similar and may be interested in exploring the opportunities further.

From a search carried out by InfoCamere on 7 March 2016, there were 4969 "quasi-startups" and no fewer than 23,598 "quasi-innovative SMEs". These figures are equal to, or significantly exceed in the case of innovative SMEs, the population currently registered in the special sections of the Register. The Ministry has therefore prepared two newsletters to "hunt" for all potential startups and potential innovative SMEs, and they were sent by certified email on 21-22 March 2016.

In the weeks following the newsletter, the Ministry was contacted by a number of companies that were in fact interested in taking up the available incentives. However, experience has shown that in order to guarantee a more efficient functioning of this tool, systemic awareness-raising is needed, to inform companies of the need to check their certified email addresses regularly: even several weeks later only a minority of the target companies had actually seen the document and request information continued to arrive in the MISE inbox even several months later. Similar outreach campaigns such as the one carried out by Istat to promote the #StartupSurvey, were found to be more efficient when the communications were sent to ordinary email addresses: even if they are not generally made public on the companies' websites they are not easily accessible to the public administration. Generally, innovative startups and SMEs do not include this information when registering on the special section or updating their details.

5.3 CUSTOMER CARE EMAIL ADDRESSES: INCOMING EMAILS AND TRENDS

The Directorate General for Industrial Policy, Competitiveness and SMEs provides a regular "customer care" service in relation to policies for innovative startups and SMEs, through a series of email accounts, which the administration uses to communicate with businesses, consultants and other stakeholders looking to receive information, clarification or further details about the regulations. The addresses are:

- startup@mise.gov.it, operational since April 2012;
- pminnovative@mise.gov.it, set up in April 2015;
- info.italiastartupvisa@mise.gov.it, set up in June 2014 and used to reply to all requests for information from businesses interested in the Italia Startup Visa and Italia Startup Hub.

There is also another ordinary email address, italiastartupvisa@mise.gov.it, which is normally used for the receipt and management of applications for the

Italia Startup Visa programme; however this account also receives a number of requests for information, in the same way as for the other accounts.

These email accounts are managed by the Directorate General's staff responsible for managing the policy. They reply to applicants quickly, in accordance with the current requirements of the regulations. However, in the case of particularly complex queries, they are referred to the Directorate General for the Market, Competition, Consumers, Supervision and Technical Regulation: in cases considered to be in the public interest this may result in the publication of interpretations or circulars on the website www.mise.gov.it (see para. 5.4).

Figure 5.1 describes the breakdown of emails received from external parties – Chambers of Commerce, trade associations, accountants and lawyers, but most of all from individual potential business owners, as well as students or academics interested in analysing the world of innovative business from a scientific point of view. The startup account, which has been open for the longest time, received 2,811 emails as of 30 June 2016 – more than 80% of the total. Of these, as can be seen from Figure 5.2 below, approximately one in three (798) was received in the Report. (Second half of 2015-1st half of 2016): most of the emails were received in the other accounts during the last year.

Figure 5.3 1: Total distribution of emails received

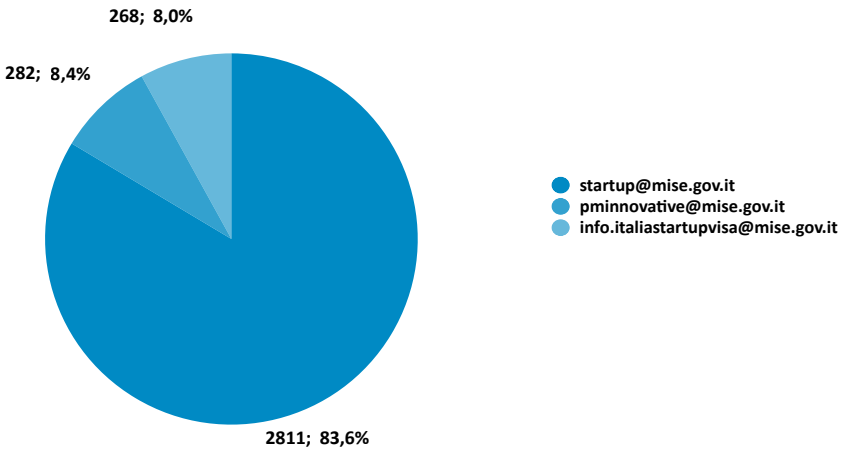
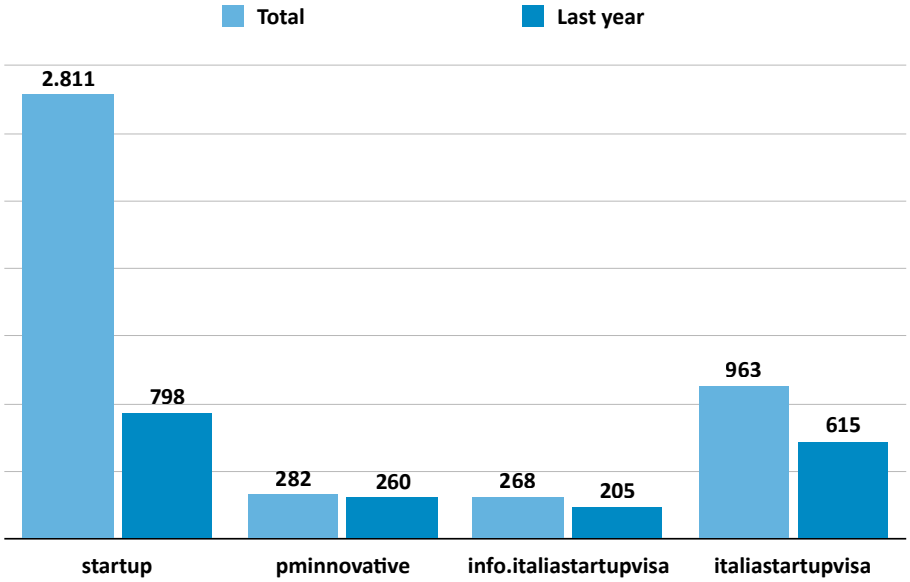


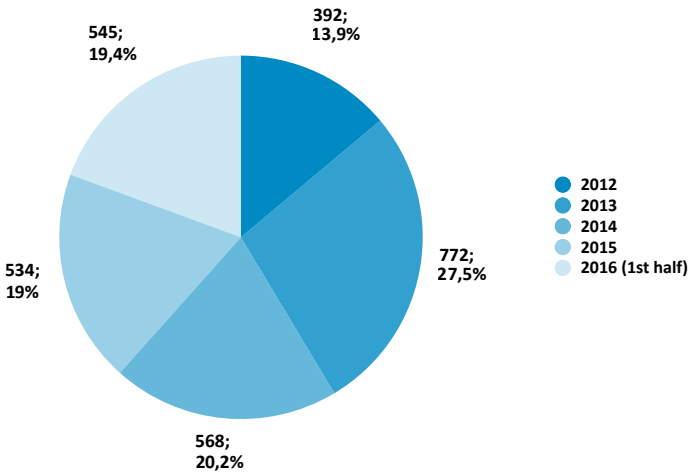
Figure 5.3.2: Emails received, total and last year (second half of 2015-1st half of 2016)



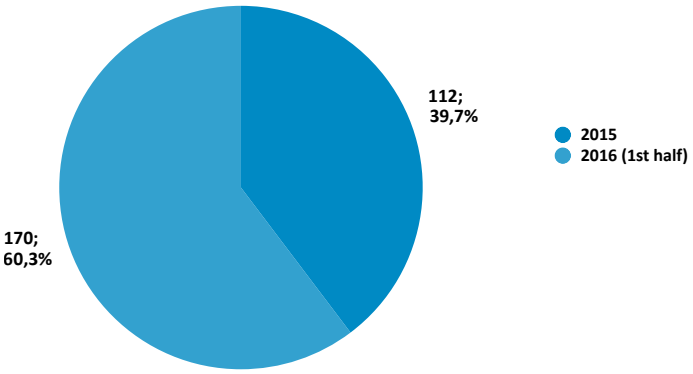
Looking at the distribution by year, we can see that in the first half of 2016 the startup accounts had already received more emails than in the whole of 2015. All the other accounts also saw an upturn in activity: more than 40% of the Italia Startup Visa emails were received in the past six months, proof of a clear upturn in the trend in applications (see par. 4.6); the same applies to the corresponding information email account, which is now used much more frequently than in the past. For innovative SMEs it is only possible to make a comparison with part of 2015: however in a shorter period of time (the first six months of 2016 compared to the last eight of 2015) a larger number of emails was received.

Figure 5.3.3, 5.3.4, 5.3.5, 5.3.6: Emails received, distribution by year

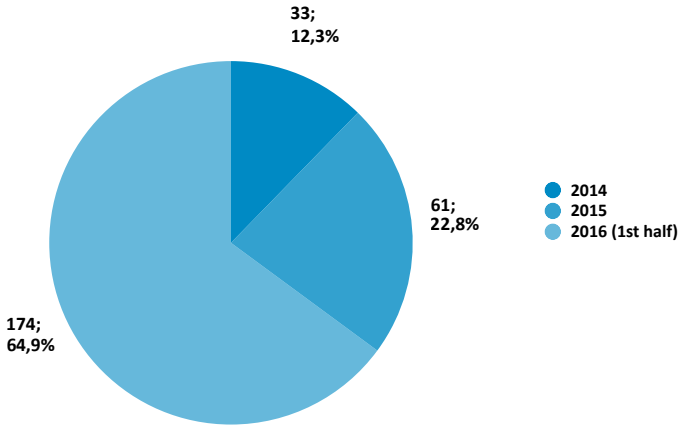
startup@mise.gov.it

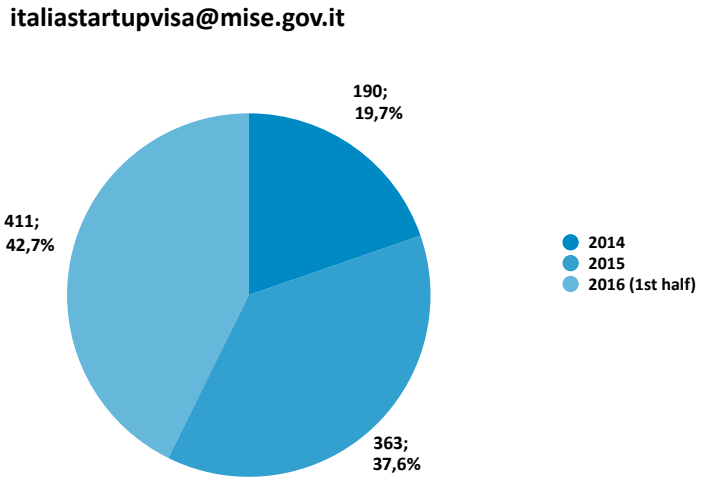


pminnovative@mise.gov.it



info.italiastartupvisa@mise.gov.it





5.4 LEGAL INTERPRETATIONS AND CIRCULARS

The Ministry's website www.mise.gov.it contains a section on all the opinions and circulars published in relation to the regulations on innovative startups and PMI's, prepared by the Directorate General for the Market, Competition, Consumers, Supervision and Technical Regulation – and in particular by the Division VI - Business Register, commercial and artisanal industries and recognition of professional qualifications - in close collaboration with the Directorate General for Industrial Policy, Competitiveness and SMEs, which is directly responsible for these policies.

This documentation, which currently consists of 37 opinions and circulars, is freely available at http://www.mise.gov.it/index.php/it/impresa/registro-delle-imprese/startup. There is only one section for innovative startups and SMEs, because the regulations on the second category overlap the former with regard to many aspects (such as the innovation requirements contained in Art. 25(2)(h) of Decree Law 179/2012 on innovative startups, and Art. 4(1)(e) of Decree Law 3/2015 for innovative SMEs, the structure of which is substantially identical). Therefore it is often possible to issue a single interpretation document for both of these categories even if the dual applicability is not expressly stated.

These interpretations should be seen as a supplement to the ordinary support available to the policy recipients, which is mainly provided through the dedicated email accounts startup@mise.gov.it and pminnovative@mise.gov.it (see par. 5.3). In most cases, these interpretations are provided after enquiries are received through these email accounts. They can be received from Chambers of Commerce or from businesses and consultants and relate to how to interpret matters that generally require more technical responses. If the query is considered to be in the public interest, a reply will be provided in the form of an interpretation and will be published on the Ministry's website for the benefit of all potentially interested parties.

13 opinions and 2 circulars were published prior to 1 July 2015, the relevant date for this Report. As most of the opinions preceded the entry into force of the regulations on innovative SMEs, formally speaking they refer to innovative startups: some relate to issues specific to SMEs, such as the general criteria (relevance of the date of formation for the purposes of applying the regulations, the opinions of 8 August 2014 and 19 January 2015) and the procedure for the recognition of an innovative social enterprise (Circular 20 January 2015 no. 3677/C); while others apply to both sets of rules, such as the one dated 22 August 2014 on the concept of "collaborator of any kind" and the opinions concerning the information to be submitted periodically to the Chamber of Commerce (22 August 2014, 19 January 2015, Circular 3672/C of 29 August 2014).

During the Report period, 20 opinions and 2 circulars were published. 10 of them also related expressly to innovative SMEs, while some apply exclusively to that category. With two exceptions (2 September 2015, on the correct application of information criteria to shareholders in companies that were "pulverised" following a listing on a multilateral trading platform, and 4 November 2015, concerning the self-certification of the names of shareholders if they include a holding company, the interpretations mainly relate to the issue of mandatory certification of financial statements; they are listed in chronological order below:

- **Opinion of 3 September 2015**, "Answers to 5 queries on balance-sheet certification";
- **Circular 3683/C of 3 November 2015**, "Certification of financial statements when registering in the special section";
- **Opinion of 3 November 2015**, "Query regarding certification of financial statements – Article 4(1)(b) of Decree Law 3/2015"
- **Opinion of 26 January 2016**, "Requirement for certification of financial statements when first registering in the Special Section. Voluntary certification and legal certification" – this governs the principle of post-dated and retroactive certification for those companies that were not previously subject to certification requirements.

Opinions that relate exclusively to innovative startups refer to the company object criterion (20 May 2016, which deals with the impossibility of separating innovation potential from high technological value and the distribution of profits (20 May 2016), as well as Circular 3691/C of 1 July 2016 on the new procedure for incorporating an innovative startup as an s.r.l. (See para. 1.6), which further clarifies the contents of Ministerial Decree of 17 February 2016 and the Directorial Decree of 1 July.

Most of the opinions published in the last year relate to innovative startups and SMEs. See the opinion of 2 September 2015 on the correct application of the obligations to report information about shareholders of companies "pulverised" following equity crowdfunding campaigns, or that of 3 November 2015 on the changes to the innovation criteria: the text of the opinion only makes express reference to innovative startups, but clearly can also be extended to SMEs.

4 opinions deal with the issue of industrial property rights, and can be applied to both startups and SMEs: 4 September 2015 (exclusion of trademarks), 29 October 2015 on the ownership of rights to register software, and also 29 October 2015 on the right to unregistered patents, 21 April 2016 on the possibility of assimilating patents for utility models to other forms of industrial property rights.

Finally, a number of opinions are directed at the Chambers of Commerce in order to provide an interpretation of their powers of control on the periodic annual reporting requirements (11 September 2015, 25 January 2016, 20 May 2016), on the verification of the R&D expenditure criterion (3 September 2015) and deregistration due to expiry of the eligibility period (21 March 2016).

5.5 ANALYTICS ABOUT THE WEBSITES DEDICATED TO THE POLICY

MISE website, sections dedicated to innovative startups and SMEs

Between 1 July 2015 and 30 June to 2016, the innovative startup section of the MISE website was visited 72,638 times by 48,943 users. From the figures from previous years it is possible to see a rising trend: in the first half of 2015 there were 19,562 visits, while there were 60,528 visits for the whole of 2014. The average visitor reaches the site through search engines (73% via Google), remains on the site for just over two minutes and comes from the provinces of Rome (19.3% of visits), Milan (16.9%), Naples and Turin (3.5%), Palermo (2.2%), Bologna and Padua (1.9%), Florence (1.8%) and Catania (1.3%). Most of the visits are via desktop computers (79%), with mobiles and tablets accounting for the remaining 21%.

During the same period, the innovative SME section received 22,907 hits and 14,972 single visits. The patterns are similar to those for the startup section: mainly from desktop (86%), through search engines (75%, Google) and with visits of just over two minutes. Most of the visits come from the following provinces: Milan (17.2%), Rome (16.7%), Bologna (3.7%), Turin (3.4%), Bari and Naples (2.5%), Palermo (1.9%), Padua and Venice (1.7%).

Highlights among the news items published on mise.gov.it in relation to innovative startups and SMEs included the announcement in February 2016 of the signing of the decree authorising the new online procedure for incorporatinginnovative startups in the form of an s.r.l. ("Forming an innovative startup without visiting a notary public, Minister Guidi signs decree"), which received more than 11,000 hits. The announcement of the entry into force of the simplified procedure for accessing the Guarantee Fund to include innovative SMEs ("Innovative SMEs: launch of simplified Guarantee Fund access") was the news item that obtained the most attention in this category, with 2,196 hits. The most-read interpretations were those of 4 September 2015 on the concept of collaborators "of any kind"and those on the certification of innovative SMEs' financial statements (text of 26 January 2016, text of 3 September 2015).

The website for the Italia Startup Visa and Hub programmes, italiastartupvisa.mise.gov.it, recorded an average of just over 1,000 hits per month between 1 July 2015 and 30 June 2016, peaking at 2,410 visits in April. Excluding Italy (around

half of the total), the four countries from which most of the visits originated were those that recorded the highest number of applications: China, Russia, the Ukraine and the United States. 61% of the total visits came from under 35s while 54% of the visitors were male.

The Chamber Of Commerce website for innovative startups and SMEs

The portal startup.registroimprese.it, which is the Chamber of Commerce website for innovative startups and SMEs as well as certified incubators is an essential port of call for all entrepreneurs and potential recipients of the policy. The website, which can also be accessed from pminnovative.registroimprese.it, contains most of the essential information about the requirements for the registration and renewal of an enrolment in the special section of the Business Register.

The services on offer include the interactive, user-friendly guides on how to identify the innovative profile of existing companies, or of business ideas yet to be converted into the corporate format, and a comparison between the eligibility criteria for the innovative startup, and innovative SME schemes. The site also has three essential services related to the policy operation:

- the "Atti Startup" service, which from 20 July 2016 allows innovative startups to be formed online as an srl, using the standard forms (see chapter 1);
- The list of innovative startups, SMEs and certified incubators contained in the special sections of the Register, updated weekly and accompanied by statistical information such as the number of companies and their geographical locations. The quarterly reports on Business Register trends are also published here;
- #ItalyFrontiers, the showcase for innovative Italian startups and SMEs, which presents the details found in the Special Section in a more user-friendly way and allows the companies to customise their profiles (see par. 1.4 and 5.6).

The site was visited 564,977 times by 484,255 single users, between 1 July 2015 and 30 June 2016. In the first six months of 2016 alone, there were 336,631 visits, a figure which has risen significantly compared to the same period in 2015 (180,573 visits, an increase of 86.4%) and the second half of the same year (228,346 visits, an increase of 47.4%).

This increase is thanks to the number of daily visits having become consistently higher, from mid-November: since that time the number of monthly visits has regularly been in excess of 50,000, peaking at 64,032 in March. The average number of daily visits is 1,554, with the highest numbers recorded in the second week of November 2015 (2,909 visits on 12 November). The average figure takes into account the reduced number of visits during the weekends: excluding the months of May and June 2016, on weekdays between November 2015 and April 2016 the website regularly recorded more than 2000 visits per day.

Most visit to the site are direct traffic (38% of the total), followed by external links (35%), and the use of search engines (25%). The vast majority (88%) of

those visiting the site only visit a single page while those arriving from other websites, and above all from search engines, tend to visit multiple pages. The duration of the average session for those visiting the site for general research is 3.5 times longer than those making direct visits (180 seconds compared to 50.6). Access by the social networks is still rare (4,641 new sessions opened, less than 1% of the total). Considering all types of visit, the number of pages viewed per session is 2.17, with an average duration of each visit of just under 85 seconds.

Responsibility for the traffic from external links is mainly attributed to the websites of the Chamber of Commerce network: registroimprese.it takes the lead with more than one-fifth of all referral visits, with no fewer than nine provincial Chamber of Commerce sites among the top 20. The two domains of the Ministry of Economic Development appear in second and tenth places; the Invitalia Smart&Start website is in seventh place. Among the informative websites, the leader is economyup.it, in 11th place.

The total of all pages viewed by visitors is 1,223,320. After the home page (530,722 hits) comes the startup summary page (189,822 visits) and the main page of #ItalyFrontiers (183,866 hits); the page on innovative SMEs has around 74,000, the startup/SME comparative table has 17,246 hits, while the weekly report page has 15,376. 61% of visits to the startup page and 56.7% of the visits to the innovative SME page come from search engines. The numbers generated by the three pages with downloadable updated databases on the policy beneficiaries, are also interesting: 8197 for the innovative startup database, 4286 for the SMEs and 1211 for the incubators.

5.6 #ITALYFRONTIERS: TURNING CHAMBER OF COMMERCE FORMALITIES INTO A GROWTH OPPORTUNITY

At the end of October 2016 there were 263 innovative startups – just over 4% of the total – who had completed their profiles on ItalyFrontiers, the bilingual, free, online platform launched in November 2015 with the aim of promoting the visibility of innovative Italian businesses among investors and traditional companies interested in supporting open innovation processes (for more information see section 1.4). By contrast 25 innovative SMEs had completed their profiles, 8.5% of the total. 219 had completed the company profile in English, including 198 startups and 21 innovative SMEs.

Tabella 5.6.a: Trend delle iscrizioni di startup e PMI innovative a #ItalyFrontiers

MONTH	NO.
October 2015	9
November 2015	60
December 2015	21
January 2016	16
February 2016	14

MONTH	NO.
March 2016	39
April 2016	22
May 2016	41
June 2016	28
July 2016	12
August 2016	3
September 2016	13
October 2016	11
Total	**289**

Source: InfoCamere

The number of innovative startups that have completed their profiles on #ItalyFrontiers is large enough to give a description of the main trends. Having completed this brief overview of the Register data, we will analyse the information provided voluntarily by the businesses in the customisable section of their profiles, which is the most distinctive feature of this platform.

First, it can be seen that 43 startups registered in the special section during 2016, 98 in 2015, 71 in 2014 and 51 in 2013. Looking at the dates of formation, 32 innovative startups had been created in 2016, 73 in 2015 and 2014 apiece, 50 in 2013 and 35 in 2012 and prior years. The regions of Italy with the largest number of innovative startups registering for #ItalyFrontiers were Lombardy (49, 18.6%), Lazio (26, 9.9%) and Marche (23, 8.7%). The figure for Marche is largely thanks to 12 registrations from the province of Ancona, which was fourth, together with Brescia, in terms of the number of profiles published after Milan (30), Rome (20) and Turin (13).

Table 5.6.b: Regional distribution of innovative startups registering on #ItalyFrontiers

REGION	NO.	PERCENTAGE
Lombardy	49	18.6%
Lazio	26	9.9%
Marche	23	8.7%
Emilia-Romagna	22	8.4%
Campania	21	8.0%
Piedmont	21	8.0%
Veneto	18	6.8%
Sicily	14	5.3%

REGION	NO.	PERCENTAGE
Tuscany	11	4.2%
Puglia	10	3.8%
Calabria	9	3.4%
Sardinia	9	3.4%
Friuli-Venezia Giulia	8	3.0%
Liguria	7	2.7%
Trentino-Alto Adige	5	1.9%
Abruzzo	4	1.5%
Basilicata	4	1.5%
Molise	2	0.8%
Italy	**263**	**100%**

Source: InfoCamere

With regard to the total capital subscribed by the companies, 159 innovative startups were below €10,000, 79 were between 10,000 and 100,000 while a further 20 recorded higher values.

Of the innovative startups with figures available on value of production, 129 recorded a value of less than €100,000; another 60 were between 100,000 and 500,000, and 6 exceeded 500,000 (two past the million mark).

Almost all the innovative startups on #ItalyFrontiers were incorporated in the form of a limited liability company: 253 out of 263, of which 43 were "simplified" srl companies. The remaining 10 businesses were equally distributed among cooperatives and SpAs.

Looking at the standard sector classification based on the Ateco 2007 codes, the distribution of companies with an #ItalyFrontiers profile is not significantly different from the distribution for the overall population of innovative startups. 216 were classified in the services sector: the most frequently occurring Ateco code was "J 62", software production, with 100 companies followed by "M 72" (R&D) with 37 and "J 63" (information services) with 30. There were 31 companies operating in manufacturing industries, particularly in machinery production, 12 in commerce and 3 in the tourism sector.

Having completed this description of the reference population in terms of Register data, we can now concentrate on the information provided freely by the businesses, which allows a deeper analysis. A special feature of #ItalyFrontiers is that the companies can include up to 3 self-descriptive tags, to characterise their businesses. The purpose of the tags is to overcome the rigidity of the category structure of the traditional statistical indicators, particularly the Ateco codes, by giving a more intuitive, authentic description of each business.

Overall, the registered innovative startups provided 363 tags. Some of them

appear multiple times while most of them were not indicated by other companies. However, it should be remembered that many of the tags vary in terms of spelling or language, for example “IoT” or “Internet of things”, despite the auto-complete function available on the online form. If the similar expressions belonging to the same semantic field are grouped together, it can be found that the most common types are “IoT” (14 appearances), “tourism” or “travel” (14) and “software” (13 appearances). Many of the other tags refer to the same sector but with a marked difference in vocabulary: an innovative startup in the renewable energy sector may have included, instead of the generic “energy” (8 appearances) also the terms “cleantech” or “green tech” (9 cases) or “efficiency” (3 cases). Many of the single tags make specific reference to the product or service offered by the company in question: one particularly clear example was the companies operating in the food industry (4 appearances for ice cream or variants).

There are various examples of how the self-descriptive tags help to clarify the activity of the company. For example with the “travel” tag, there are various companies with the Ateco code “J 62”, i.e. Software production, and not “N 79”, which is the reference code for travel agencies: if the analysis was limited to Ateco codes alone, it would not be possible to understand the sector of application of the software in question. Companies indicating “IoT” also include companies whose code refers to hardware (such as C 27, manufacturer of electrical appliances) and codes relating to software production, when it is well known that this emerging sector overlaps in both these categories.

Looking at the maturity of the innovative startups registered on #ItalyFrontiers, the vast majority confirmed that they are on the market already (162), while 55 indicate they are in a development phase. These figures are consistent with those relating to the state of advancement of the product: 102 startups said they were already on the market with their products while 47 had made sales already; a further 52 were in the beta or prototyping phase. This information is complemented with a description of the team dynamics: 154 startups said they had already completed their shareholder body while 33 had deficiencies on the technical side and 14 on the business side, and 40 have yet to define their teams.

58 innovative startups had a prevailing interest in the foreign markets, while in 14 cases they were exclusively interested in the international scene. For 138 of the startups, the international market was a secondary target. Conversely, there were 182 companies primarily oriented towards the Italian market, 44 exclusively, and 45 that considered it a secondary target.

The innovative startups with a profile on #ItalyFrontiers can also declare up to 6 “interests”, in other words stakeholders that the business has a particular requirement for during that phase, and among which it is interested in promoting its business. The requirements most frequently declared by innovative startups include a search for investors and customers, in 168 and 160 cases - this was the vast majority of the startups that completed the field on the company’s interests. This was followed by a search for business partners (139) and, some way behind, technical support figures (62), academic partners (48) and finally a position in a business incubator or co-working space (23).

Finally, on a relational level, there were 78 innovative startups with a profile on #ItalyFrontiers that said they were currently associated with a certified business incubator: these include WCap (Telecom Italia, 17 startups), followed by FVB (15), Digital Magics (11) and I3P (8). 69 startups had links with trade associations: in particular 41 said they were affiliated to branches of Confindustria, including Assolombarda (nine cases) and Associomedica (4). 5 companies said they were associated to Confcommercio and the same number to Italia Startup.

5.7 THE "EASITALY" ROADSHOW

Easitaly is a publicity campaign intended to disseminate the government's policies and innovative startups and SMEs across the country. The campaign took the form of a series of meetings organised in eight regions of Italy between April and November 2016.

The roadshow was based on an idea of MISE in collaboration with Invitalia. Each meeting was attended by a number of local stakeholders such as the regional branches of Confindustria, the Chambers of Commerce, and local universities.

The aim was to offer the public a full introduction to government laws in support of innovative enterprise, from the foundations through to the most recent developments. The target was mainly:

- Shareholders and collaborators in innovative startups and SMEs already formed, or in the process of being formed;
- Potential entrepreneurs: new graduates, students in the last few years of university, creatives and digital experts;
- Investors such as venture capitalists or business angels, and companies promoting innovation services such as hubs or accelerators;
- University lecturers, reporters and professional consultants.

Each meeting was structured into three sessions:

- The first was dedicated to a presentation of the incentives: the opportunities available for innovative startups and SMEs under national laws, the procedure for taking part in Smart&Start Italia and the regional incentives for innovation;
- During the second session, the focus shifted to the local startups, who gave accounts of their experiences;
- The third section was dedicated to direct interaction between the businesses and the representatives of the institutions who were able to respond directly to requests for more information from the interested parties and potential beneficiaries.

The roadshow was held at:

- **Cagliari** – 20 April (University of Cagliari);
- **Reggio Calabria** – 4 May (Mediterranean University of Reggio Calabria);
- **Catania** – 18 May (Confindustria);

- **Bari** – 27 May (Confindustria);
- **Bologna** – 9 June (Smau);
- **Matera** – 23 June (Casa Cava – Sassi di Matera);
- **Palermo** – 29 September (Confindustria);
- **Caserta** – 6 October (Confindustria);
- **Lecce** – 20 October (University of Salento);
- **Pescara** – 16 November (Confindustria).

A POLICY BASED ON EMPIRICAL FINDINGS: EVALUATION EXERCISES

6

The task of monitoring and assessing the findings is not merely a political commitment, but an express legal requirement, when it comes to legislation to support innovative startups. Article 32(2) of Decree Law 179/2012 ("Publicising and assessing the impact of the measures") provides for the formation of a permanent monitoring and assessment Committee with the contribution of all the institutions involved in implementing the policy, and the technical expertise of the National Institute for Statistics (Istat) and of independent experts.

Subparagraph 5 of the same article gives Istat the task of monitoring and evaluating the measures. On a special section of its website, Istat also publishes a series of statistical tables on the main findings generated by the policy. The law specifically provides that these databases are available openly, so that independent parties can also monitor and evaluate them (subparagraph 4) and to enable the processing and the publication of the data, which must be free of charge (subparagraph 6). Finally, subparagraph 7 of the article requires MISE to present an annual report to Parliament on the progress and impact of the policy, on innovative startups.

The main impediment to a rigorous assessment of the policy is that it has not been in force for long. Despite the significant growth in the population of innovative startups recorded in recent years, the information available to us is not yet sufficiently consolidated, given the short period of time. For this reason, the incentives have only expressed a part of their potential, and there can be no assessment of the impact over the medium to long term. In addition, in order to become common practice, many incentives require a cultural shift – for example towards equity crowdfunding, which is still seen as a niche area – or are impeded by other obstacles such as the new form of online incorporation procedure which has only been in operation for a few months and which is still encountering a degree of resistance on the judicial level. The technical impediments to instant assessments include the fact that the information on the registered companies' financial statements and fiscal data is only available from the second half of the year following the year of interest. This creates significant delays in the possibility of analysing the performance of schemes such as the R&D expenditure tax credit, and incentives for equity investments in startups.

This is perhaps the reason why Istat's previous attempts to assess the situation have not yet shown an unequivocal causal link between the performance of innovative startups, which appears to be different from that of the other recently-formed joint stock companies – for example in terms of the higher ratio of intangible assets/balance sheet assets – and the measures in the Italian Startup Act. Nevertheless, the steady improvement in the quality and quantity of the data available on the beneficiary companies has enabled an initial econometric analysis of the impact of the regulations, or components of it, by researchers and independent bodies.

This section contains two studies of this kind. First is a study by Milan Polytechnic (par. 6.1), which concentrates on the financing trends seen for innovative Italian

startups with particular reference to the ratio between access to bank credit and the risk capital market and seeks to analyse the potential effects of reporting, complementarity or crowding out. The second paper, published by three researchers from the Bank of Italy (par. 6.2), takes a more holistic approach to evaluating the policy, offering an analysis of the impact of the schemes on the innovative startups' overall financial structure, their investment capacity, and on various growth indicators.

6.1 A STUDY ON ACCESS TO CREDIT AND RISK CAPITAL AMONG INNOVATIVE STARTUPS

A recent scientific paper, presented at the ENTFIN Conference 2016 in Lyon by Emanuele Giraudo, Giancarlo Giudici and Luca Grilli (Milan Polytechnic) entitled "*Industrial policy and the financing of young innovative companies: evidence from the Italian Startup Act*"[59] , is intended to shed light on the characteristics of the innovative startups that best predict the recourse to the two main mechanisms available under the "Growth 2.0 Decree" in order to facilitate their funding: tax incentives available to equity investors and the hedging of credit risk through the facilitated intervention of the SME Guarantee Fund.

It is a well-established opinion that one of the main impediments to developing a startup is access to financial resources particularly in the early stages. There are two reasons why this market inefficiency is regularly mentioned: the presence of spillovers of knowledge in innovative businesses, which can de-incentivise investments in R&D due to inefficiencies in methods used to protect intellectual property[60]; the existence of a serious information gap, between business owners and investors, which reveal issues with selection and moral risk between the two sides increasing inefficiencies and further limiting the possibility that these companies will be provided with the necessary finance[61].

The purpose of this study is to assess the impact of the policy on the early-stage trends in startup financing. The reference population was the Business Registered in the special section for innovative startups, which number 3006 as of 8 December 2014 (the reference date for the study). Most of the companies were formed between 2012 and 2014, although a few were formed earlier than that, given that the policy can have a retroactive effect of up to 4 years.

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59 Giraudo, Emanuele, Giancarlo Giudici and Luca Grilli (2016). "Industrial policy and the financing of young innovative companies: evidence from the Italian Startup Act", 15 June 2016.

60 V. Nelson, R. (1959), The simple economics of basic scientific research, Journal of Political Economy, 67, pp. 297–306; Arrow, K. (1962), Economic welfare and the allocation of resources for invention. In The rate and direction of inventive activity: Economic and social factors, Princeton University Press, pp. 609-626.; Teece, D.J. (1986), Profiting from technological innovation: implications for integration, collaboration, licensing, and public policy, Research Policy, 15, pp. 285–305.

61 Carpenter, R. E., Petersen, B.C. (2002), Capital Market Imperfections, High-Tech Investment, and New Equity Financing, Economic Journal, Royal Economic Society, 112(477), pp. F54-F72.

The information gathered dates back to December 2014 for the venture capital and financing data, and June 2015 in reference to the innovative startups' access to the SME Guarantee Fund. It was drawn from a population of 2526 innovative startups (excluding the companies for which financial data and registered financial statements were not yet available).

The data highlights several interesting dynamics on the characteristics of the innovative startups receiving external funding. However, it should be noted that because of the limited period of time covered by the study, these findings should be interpreted as preliminary, and will necessarily require future research.

Venture Capital (VC) and the SME Guarantee Fund

Looking at the aggregate data for access to external finance summarised in Table 6.1.a, the companies receiving at least one investment from a VC fund amount to 321, which is 12.7% of the total. In detail, there were 179 companies funded by at least one independent venture capitalist (IVC, 7% of the sample) compared to 142 that were invested in by a captive venture capitalist (CVC). Captive investors are financial operators controlled by financial or industrial institutions, and who dictate the strategic lines of the fund and provide the capital requested for the investment activity. There were 337 startups resorting to the Guarantee Fund to obtain a loan (13.3%).

Table 6.1.a Trends in the funding of innovative startups

	STARTUPS FUNDED	
SOURCE OF FINANCE	**NO.**	**%**
Startups funded by VC	321	12.7
Startups funded by a loan backed by the Guarantee Fund	337	13.3
Startups funded by VC and guaranteed loan	64	2.5
SECOND TRANSITIONS	**NO.**	**%**
Transition: from VC-backed = VC-backed + Guaranteed loan	48	75.0
Transition: from Guaranteed loan = Guaranteed loan + VC-backed	1	1.6
Transition: from nil = Guaranteed loan + VC-backed	**15**	**23.4**

Table 1: access to external funding (absolute and percentage values) for the total sample. Absolute and percentage value for the second transitions relating to 64 innovative startups that received both types of finance.

Source: Giraudo, Grilli, Giudici (2016)

64 innovative startups (2.5% of the sample) managed to obtain both sources of finance during the reference period. The transition from startup funded by one of the two methods to a startup funded by both was defined "second transition". This is a fairly limited number, indicating that at this stage, access to both types of funding is not common for innovative Italian startups. This represents an initial indication of the lack of any significant impact of reporting

or interdependence between the two methods analysed. However, indexing at 100 the number of companies funded by both methods, what emerges is a larger number of companies who firstly obtain VC and then guaranteed loans (75%), while the opposite situation only occurred in one case (1.6%). Therefore, while the reporting effect may seem weak, it is also true that it has a much greater impact from VC towards the Guarantee Fund, rather than the contrary.

Econometric analysis

An analysis of the effects of the policy on the startups' access to risk capital and guaranteed loans, and the existing correlation between those measures was done by using a bivariate discrete-time model[62]. The model is based on two equations, whose dependent variables are the probability of obtaining an investment through VC (equation 1) and a guaranteed loan through the SME Guarantee Fund (equation 2).

Two main categories of variables were defined: one relates the characteristics of the business, and the other to the local context in which it operates. The models also include control variables concerning the startups' sector of origin, and the national macroeconomic scenario.

From a general observation of the results it can be affirmed that the innovative startups obtaining VC investments are significantly different from those obtaining bank credit via the SME Guarantee Fund, with particular regard to their size and age.

Firstly, the estimates show that the newer innovative startups find it easier to access guaranteed credit compared to VC (this is always valid except for the first year of life of the startup, in which, all other things being equal, the companies' probability of accessing one type rather than another is fairly similar). Conversely, all other things being equal the number of employees in the company seems to be positively correlated to the possibility of obtaining VC funding; for the Guarantee Fund, the opposite effect was found.

Analysing the results of the regressions, a high degree of financial leverage (ratio of debt to equity) has an adverse impact on VC funding for startups; while it is positive in the case of guaranteed loans. This result can be read in two ways: this highlights that there is still a degree of segmentation between two different types of innovative startup. Companies that have already used financial leverage in the past are typically more reluctant to seek additional finance of another type, at least in the short-term. From another point of view, this can also be seen from the angle that venture capitalists typically focus on startups with low indebtedness, for their investments.

Looking at the ratio between the managerial experience of the personnel in the innovative startups and their access to funding, the presence of managers in the shareholder body is positively correlated in both categories. For the VC, the correlation is statistically stronger, confirming that professional investors pay

62 V. Mosconi, R., Seri R. (2006), Non-causality in bivariate binary time series. Journal of Econometrics, 132.2, pp. 379-407.

particular attention to companies led by individuals with specific managerial experience.

With regard to the geographical variables, there were no significant correlations in either of the two equations for VC or for guaranteed loans.

The analysis of the dichotomic descriptive variables in the sector of origin[63] show that there is a higher likelihood of receiving VC investment for an innovative startup in the software or manufacturing sectors. The startups in this category also have a higher propensity to use the Guarantee Fund.

The second part of the econometric study related to the "second transition", in other words the probability of an innovative startup becoming VC-backed if it had previously had access to guaranteed bank credit and vice versa. In line with the descriptive statistics outlined above, what emerges is only a weak, non-statistically significant correlation between the two sources of funding. This indicates a substantial lack of any strong interdependence between the two financing systems. At the same time, the result is only provisional and preliminary, given the limited period of time considered in the study and considering that the innovative startups only had access to the SME Guarantee Fund from the middle of 2013. It would therefore be rash to draw any definitive conclusions as to the existence of interdependence between these two measures, and this figure is only partial evidence that must be tested over a longer period of time.

The same evaluation process was then repeated by changing the dependent variable for VC, taking into account only the investments made by IVCs. The results of these regressions essentially confirm what was seen previously.

To conclude, the analysis highlights the existence of an "institutional" division of labour between the two measures: each method seems to address a specific type of innovative startup. Initially, there do not appear to be clear interdependencies between these two methods.

6.2 AN INITIAL HOLISTIC ASSESSMENT OF THE POLICY: A STUDY FROM THE BANK OF ITALY

A recent study by a team of Bank of Italy researchers (Paolo Finaldi Russo, Silvia Magri, Cristiana Rampazzi) analysed the characteristics of innovative startups and highlighted the distinctive features in terms of their financial performance, offering an initial assessment of the effects of the dedicated policy[64]. The analysis focuses on the incentives introduced to encourage the raising of external funding (both debt and equity) and evaluates the impact of this on the overall financial structure of the innovative startups, their investment capacity, and on various growth indicators.

63 The segmentation was done according to the Ateco code classification, by dividing the sample into four main categories: Research and development (R&D), Software, Manufacturing and Services.

64 P. Finaldi Russo, S. Magri and C. Rampazzi, "Innovative startups in Italy: their special features and the effects of the 2012 law" Questioni di Economia e Finanza, no. 339, July 2016 and Politica Economica/ Journal of Economic Policy, vol. XXXII(2), 2016.

The study was based on a comparison of the financial statements of around 1800 innovative startups and those of a sample of businesses of the same age and size (approximately 135,000) (Table 6.2.a). The data was taken from the Cerved databases which cover all joint-stock companies currently trading in Italy, and relate to the period 2013-14[65].

Tabella 6.2.a: Caratteristiche del campione di startup (valori percentuali)

	INNOVATIVE STARTUPS		OTHER STARTUPS		MATERIALITY (1)
	NO.	%	NO.	%	
No. of startups	**1,758**		**134,261**		
2013 only	*66*		*99,057*		
2014 only	*801*		*35,204*		
2013 and 2014 (2)	*891*		*78,704*		
SECTORS					
Manufacturing	317	18.0	20,070	14.9	***
of which: HT(3)	*95*	*5.4*	*617*	*0.5*	***
Services	1,441	82.0	114,191	85.1	***
of which: HT(3)	*947*	*53.9*	*8,958*	*6.7*	***
Hi-Tech	*1,042*	*59.3*	*9,575*	*7.1*	***
AREA					
North	1,044	59.4	58,780	43.8	***
Centre	400	22.8	35,881	26.7	***
South	314	17.9	39,600	29.5	***
SIZE					
Micro	1,712	97.4	131,223	97.7	
Small	46	2.6	3,038	2.3	

65 The analysis refers to the years after the entry into force of the 2012 law, which defined the innovative startups for which the financial statements are available. The Cerved analysis is based on the annual reports filed with the Chambers of Commerce.

Age					
1-2 years of age	1,156	65.8	68,440	51.0	***
3-5 years of age	602	34.2	65,821	49.0	***
Total observations	*2,649*		*212,965*		

(1) T-test materiality levels: 1% (***), 5% (**), 10% (*). (2) For startups with financial reports in both years, the figures refer to 2013. (3) Eurostat definition for the high-tech sector.
Source: Finaldi Russo, Magri, Rampazzi 2016

Unsurprisingly, the innovative startups are concentrated in high-tech production segments (around 60% compared to 7% of the other companies). 59% of them are based in the northern regions compared to 44% for the other startups.

Partly because of the legal requirements for inclusion in the special section, innovative startups have a much more marked innovation profile compared to the other recently incorporated companies. For example, given the same geographical region, sector of activity and age of company, there is a significantly higher incidence (more than 15 percentage points) of the ratio of intangible assets to total assets – including the costs incurred for R&D, patents or trademarks, these costs are typically correlated to the level of innovation of a company. The percentage of companies that have not yet entered the marketing phase is double the percentage for the other companies (20% and 10% respectively). This is a typical characteristic of new or recently formed companies that intend to produce highly innovative goods or services.

Table 6.2.b: Profile of innovative startups(1) (percentage values)

	AVERAGES			DIFFERENCE BETWEEN INNOVATIVE STARTUPS AND OTHER STARTUPS, OTHER THINGS BEING EQUAL (2)	
	INNOVATIVE STARTUPS	OTHER STARTUPS	T-TEST	ALL SECTORS	HI-TECH SECTORS ONLY (3)
COMPOSITION OF ASSETS (4)					
Liquid assets/total assets	24.3	19.2	***	3.489***	2.197***

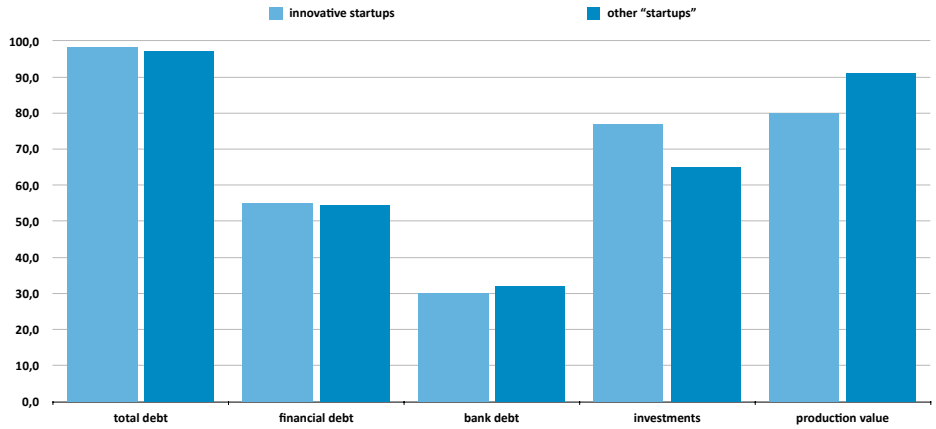
Intangible assets/total assets	33.6	12.5	***	16.550***	16.450***
INVESTMENTS (4)					
investments/total assets	22.1	10.1	***	11.010***	10.650***
GROWTH					
Growth in turnover (2013-14)	53.1	16.2	***	35.030***	32.340***
Growth in total assets (2013-14)	40.1	19.9	***	18.160***	17.710***
FINANCIAL STRUCTURE (4)					
Total debts/total assets	60.5	74.6	***	-9.602***	-8.092***
leverage	57.5	63.8	***	-2.775***	-0.747

(1) The indicators were winsorized at the 5th and 95th percentiles. T-test materiality levels: 1% (***), 5% (**), 10% (*). - (2) Coefficients of the dummy that identifies innovative startups in the OLS estimates of the various indicators with controls on the financial reporting year, sector of the economy, geographical region, size and age of the company. - (3) The high-tech segments are identified according to the Eurostat definition (see glossary entries: "High-tech classification of manufacturing industries" and "Knowledge-intensive services (KIS)"). - (4) Only includes companies with indicators above zero.

Source: Finaldi Russo, Magri, Rampazzi 2016

The innovative startups that have started selling have higher rates of growth in turnover and assets compared to the other companies, helped by rates of investment that are more than 10 percentage points higher. The best financial conditions, which are characterised by higher liquidity and risk capital levels, enable innovative startups to support more innovative, riskier investment projects. The differences between the innovative startups and the other new businesses are significant even if the comparison is limited only to those operating in the more high-tech production segments (see Table 6.2.b).

Figure 6.2.1: Percentages of companies with positive indicator values (percentage values)



Source: Finaldi Russo, Magri, Rampazzi 2016

The distinctive features of the innovative startups described above may derive from the criteria regarding eligibility and access to the special rules as determined by the legislator (self-selection effects) and from the incentives introduced by the law (policy effect). The study contains an econometric analysis designed to isolate the effect of the latter, by comparing the innovative startups with a control sample that only includes companies that, before the measure came into force, had a profile very similar to the former but did not then have access to the special rules (propensity score matching). In this way, the differences between the balance sheet indicators of both groups of companies emerging in the two years after the law came into force can be interpreted as effects of that law[66].

The main result of this analysis indicates that between 2012 and 2014, the innovative startups in the services sector, which is by far the largest group, had a higher rate of growth in external funding through either debt or capital.

Table 6.2.c: Effects of the 2012 law on various indicators (1)

	LEVERAGE	INVESTMENTS/ TOTAL ASSETS	NET EQUITY (€ '000)	FINANCIAL LIABILITIES (€ '000)	BANK LIABILITIES (€ '000)
Total	0.053*	0.058**	42.76	-25.22	27.24**
	(0.029)	(0.029)	(29.34)	(72.25)	(11.16)

66 This part of the analysis which only refers to companies that were already trading before the law came into force is based on a sample of 366 innovative startups and the same number in the control sample.

	LEVERAGE	INVESTMENTS/ TOTAL ASSETS	NET EQUITY (€ '000)	FINANCIAL LIABILITIES (€ '000)	BANK LIABILITIES (€ '000)
PER SECTOR					
Manufacturing - hi-tech (2)	-0.082	0.024	54.1	-125.8	-16.6
(58 companies)	(0.108)	(0.066)	(63.0)	(115.4)	(43.0)
Manufacturing - other sectors (2)	0.050	0.006	-17.3	-305.8	48.7
(106 companies)	(0.067)	(0.064)	(80.9)	(444.4)	(60.3)
Services - hi-tech (2)	0.104***	0.054	54.1	42.6**	31.0***
(374 companies)	(0.040)	(0.051)	(49.9)	(21.0)	(10.0)
Services - other sectors (2)	-0.007	0.104***	50.4**	40.3*	21.5*
(169 companies)	(0.059)	(0.037)	(23.5)	(24.2)	(12.2)

(1) The diff-in-diff estimate relates to the years 2012 and 2014. There are 1464 observations relating to 732 companies over two years (366 innovative startups and the same number in the control sample). The values in the table correspond to the estimated coefficients of the interaction between the dummy identifying the innovative startups and the dummy equal to one for 2014 (robust standard errors in brackets). Materiality levels: 1% (***), 5% (**), 10% (*). – (2) See note 3 to Table 6.2.a.

Source: Finaldi Russo, Magri, Rampazzi 2016

The authors have interpreted this evidence as the effect of the incentives introduced by the law on the sourcing of finance, with particular reference to the tax incentives for individuals subscribing to shares of capital in the startups, and to the facilitated access to the SME Guarantee Fund[67]. As can be seen from columns 3 and 4 in Table 6.2.c, there is a more sustained increase in the rates of investment compared to the control companies only if there is a more significant increase in the levels of risk capital.

67 As already mentioned in section 1.8, the tax incentives consist of a tax deduction of 19% of the sum invested for individuals investing in the capital of an innovative startup and a deduction of 20% of the sum invested, for corporate investors. The incentives are even higher for investments in social startups and those in the energy sector (the rates rise to 25% and 27% respectively). The law also provides for simplified, free access to the public guarantee offered by the SME Guarantee Fund.

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Agenzia Nazionale per l'attrazione degli Investimenti e lo Sviluppo d'Impresa S.p.A.

Via Calabria, 46
00187 Rome (Italy)

848 886 886
info@invitalia.it
www.invitalia.it

Ministero dello Sviluppo Economico

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Direzione Generale per la Politica Industriale, la Competitività e le PMI

Via Molise, 2
00187 Rome (Italy)

+39 06 47053557 - 3558 - 3559