Startup Survey 2016

The first national survey on Italian innovative startups

Main findings

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Introduced with Decree-law 179/2012, the ISA is a comprehensive legislative framework aimed at facilitating the creation and the growth of new hi-tech companies.

I. Key to this legislation is a legal definition of innovative startup as a specific kind of firm, an unprecedented approach in the OECD countries.

II. Companies that fulfil the requirements can register as innovative startups online and benefit from a vast array of policy measures

Purpose: support startups throughout their life-cycle (first steps, growth, maturity) and strengthen the national startup ecosystem (investors, incubators, universities…) as a whole
The Italian Startup Act: definition of innovative startup

- Limited companies
- new businesses, or operational for less than 5 years
- yearly turnover below €5 mln
- not listed on the stock market
- meets at least 1 of the 3 following criteria:

1. At least 15% of annual costs are linked to R&D expenditure;

2. employs highly qualified personnel (at least 1/3 PhD holders and students, or researchers, or at least 2/3 Master’s graduates);

3. is the owner, depositary or licensee of a registered patent, or the owner of a registered software.
The Italian Startup Act: a wide array of tailor-made policy tools

**Improvements to business climate:**
- Incorporation online and for free
- Cuts through red tape and fees
- Italia Startup Visa&Hub
- Flexible corporate management
- Tailor-made labour regulations
- Special support by ITA
- Easier to cover losses
- Exemption from regulations on dummy companies
- Work-for-equity schemes

**Funding-related measures:**
- Equity crowdfunding
- 30% tax break for investors
- Guarantee Fund for SMEs
- Smart&Start Italia

**And after the startup phase:**
- Fail-fast
- Innovative SMEs
The Italian Startup Act: an increasingly deep-rooted policy

Survey target population

Data at 31 December 2017
The Italian Startup Act: an increasingly deep-rooted policy

Aggregate turnover: **€823m**

1 in 3 startups has not deposited any balance sheet yet.
7 in 10 annual have a turnover below €100,000

Total workforce: **45,700**

Shareholders: average: 4.2; median: 3

Employees (4 out of 10 startups): average: 3.25; median: 2

21.7%: startups whose majority shares are owned by under-35s vs. 7.2% for all limited companies

### Year of balance sheet

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Total turnover</td>
<td>€118,246,057</td>
<td>€264,561,910</td>
<td>€346,357,217</td>
</tr>
<tr>
<td>Average turnover</td>
<td>€83,389</td>
<td>€176,728</td>
<td>€262,591</td>
</tr>
<tr>
<td>Annual variation in total turnover</td>
<td>-</td>
<td>+123.7%</td>
<td>+30.9%</td>
</tr>
<tr>
<td>Overall growth</td>
<td></td>
<td>+214.9%</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Registered in 2015</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total turnover</td>
<td>€194,552,033</td>
<td>€380,860,784</td>
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<tr>
<td>Average turnover</td>
<td>€103,983</td>
<td>€212,297</td>
</tr>
<tr>
<td>Overall growth</td>
<td></td>
<td>+95.8%</td>
</tr>
</tbody>
</table>
The Italian Startup Act: an increasingly deep-rooted policy

Data at 31 December 2017

✓ In 2017 39.6% of newly-founded companies were incorporated through a new digital and free-of-charge procedure. 1,117 incorporations since July 2016

✓ Between September 2013 and December 2017, ≈ €600m of loans were granted with the support of the Guarantee Fund for SMEs; €220m in 2017 alone

...and only 1.8% of startups defaulted on their credit so far

✓ The amount collected through equity crowdfunding campaigns tripled between 2016 and 2017

✓ In 2017 155 applications to Italia Startup Visa were received: an amount similar to the 3 previous years combined (161). Applicants come from 39 countries
A structured monitoring system for a truly evidence-based policy

**Full database (.csv spreadsheet)**
of registered innovative startups and SMEs
freely accessible and editable, published on
startup.registroimprese.it

**4 reports:**
- Italia Startup Visa (it – en)
- Digital incorporation
- SME Guarantee Fund
- Trends in the Business Register

**Papers and ad-hoc studies:**
- *Startup Survey*
- Independent evaluation of the policy by the STI Directorate of the OECD (to be published in mid-2018)

**Minister’s Annual Report to the Parliament**
Why Startup Survey?

The Startup Act’s monitoring system is entirely based on administrative data from the Business Register.

Such data are inherently quantitative, and focus on firms’ demographic features.

Startup Survey aims to complement nearly administrative data on enterprises with socio-economic information on entrepreneurs, such as:

- Social, educational and professional background
- Motivations driving the set up of a startup
- Sources of financing
- Sources of knowledge and strategies to protect innovation
- Awareness of – and opinion on – the various measures making up the policy

The ultimate goal is to widen the set of information available, and shape future policy interventions.
Startup Survey: the structure

4 thematic sections:

• **Section One:** the human capital of startups
  A socio-economic analysis of startups’ founders and employees, to go beyond the most widespread stereotypes.

• **Section Two:** sources of financing
  Venture capital? Bank loans? Public funding? How do Italian startuppers meet their financial needs? Is the shortage of VC really an issue for them?

• **Section Three:** innovation
  What does it mean to be «innovative»? What is the rate of R&D expenditure? How are innovations brought to the market?

• **Section Four:** the opinion of startuppers on the ISA
  Are startuppers aware of all the policy tools offered by the ISA? Do they use them? And to what extent? What are their sources of information on the ISA?
Target population and respondents

From a methodological viewpoint, Startup Survey is a **census** survey: the target population includes all the enterprises registered as innovative startups on **31 December 2015**

*Survey carried out between 31 March and 27 May 2016*

| 2,250 respondents (42.7%) | 5,150 registered startups |

The **response rate** was **high**, considering that the questionnaire was rather lengthy and complex (42 questions), and the participation was on a voluntary basis.

The respondent group is **representative** of the entire population, in terms of distribution by territory, sector and year of incorporation.
The human capital of startups
Shareholders and employees of innovative startups beyond clichés
Who really are the Italian startupper?

Portrait of the typical shareholder (4,363 shareholders)

- Man (82% of respondents)
- 43 years old
- with previous work experience (as employee, entrepreneur or self-employed professional)
- knows at least one foreign language
- graduate (72.8% at least bachelor’s degree, 16% a PhD), mainly in management, engineering and related fields, but backgrounds are diverse

Key Message

Level of education matters: the higher the level of education, the stronger the perceived consistency between educational background and duties performed in the startup

AGE

<25 = 1.6%
25-34 = 24.9%
35-44 = 35.6%
45-64 = 33.5%
>65 = 4.4%

Startupper are not always «digital natives»
Dynamics of social and territorial mobility: far from the stereotypes

Startups are deeply connected to their communities:
83% of respondents founded the company in the place they call «home» (not necessarily their place of birth)
→ Local networks and sense of territorial belonging matter

Startuppers have diverse family backgrounds

Fathers’ occupation:  
- 34.8% - employees (white- and blue-collars)  
- 24.1% - managerial roles  
- 20.6% - entrepreneurs  
- 19.9% - self-employed professionals

Mothers’ occupation:  
- 41.3% - employees (white- and blue-collars)  
- 34.1% - homemakers  
- 7.2% - entrepreneurs

→ Entrepreneurship is more acquired than inherited
Why did you found a startup?

- To launch a successful enterprise: 62.9%
- To work as self-employed: 28.8%
- To develop an innovative service or product: 77.6%
- To put university research into practice: 24.7%
- To benefit from the ISA: 7.7%
- To find a job: 9.1%
- Other: 4.8%

→ Entrepreneurship as a «backup plan» is uncommon
The other side of the story: employees

Portraits of the typical employee (5,704 employees)

- Man (75%, lower ratio than for shareholders)
- Cohort 25-34 years (50%) [further 30% cohort 35-44 years]
- Graduated (66.3%) or completed high school (28%)
- Professional background in engineering and other technical subjects (46%)
- Works in the place s/he calls «home» (80%)…
- ... and in area consistent with his/her educational path (75%)

Types of contract:

- ≈ 60% open-ended contracts
- ≈ 25% atypical contracts
  (of which 46% project-based or contract agents)
- ≈ 7% fixed-term contract
- ≈ 7% internship

27% of employees, 35% of trainees, and only 13% of managers are women

Positive correlation
consistency of duties/
level of education:
from 51% for middle school
to 94% for PhD
Section Two

How do startups get funding?

What are the most used (and searched) funding sources?

Is access to finance really that critical?
How do startups get funding?

In over 3 cases in 4, 100% of funds necessary to start-up the company came from the savings of the shareholders («own resources»).

At time of the survey, own resources still featured among financial sources in 90.2% of startups.

1 in 4 got bank loans, about 15% public funding, 11.2% equity investments (including VCs and BAs)

- bank loans: 25.1%
- equity investments: 11.2%
- local public funding: 8.7%
- national public funding: 5.6%
- donations: 3.1%
- own resources: 9.8%
How do startups get funding?

At the time of the survey, own resources are still the main form of financing for more than 2 startups in 3 (the only one for more than 1 in 2). Startups that are predominantly backed by equity investors are rare (7.3%).

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>% Main Funding Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>bank loans</td>
<td>11.9</td>
</tr>
<tr>
<td>equity investments</td>
<td>7.3</td>
</tr>
<tr>
<td>local public funding</td>
<td>1.9</td>
</tr>
<tr>
<td>national public funding</td>
<td>1.8</td>
</tr>
<tr>
<td>donations</td>
<td>0.9</td>
</tr>
<tr>
<td>own resources</td>
<td>68.4</td>
</tr>
</tbody>
</table>
Are startups satisfied with the resources available?

In spite of the emphasis usually put on access to finance, the survey shows that 4 startups in 5 consider the financial resources available to them to be **sufficient** to cover the current operations of the company.

The satisfaction level varies greatly depending on the maturity stage of the company, its sector of activity, and its location – entrepreneurs from Central and Southern Italy report lower levels of satisfaction.
What are the most searched funding sources?

A recurring theme in academic literature on startups is the apparent dichotomy between debt and equity.

It is usually maintained that startups prefer the latter, being it more suitable to high-risk activities only profitable in the long term. But is it really true?

This survey gives a much more nuanced picture. Only one quarter of startups would finance themselves only through equity.
What are the most searched funding sources?

A vast majority of startups (68.4%) **did not even try to raise capital from VCs**, other firms, or through equity crowdfunding campaigns. Among the reasons:

- Financial resources deemed sufficient **43.9%**
- Lack of confidence in the likelihood to obtain VC **14.9%**
- Reduction of decisional autonomy of founders **13.6%**

12% of respondents declares that **they received an investment offer in the past, and that they refused it.** Main reasons:

- Evaluation of the company too low **24.8%**
- Disadvantageous contract conditions **21.9%**
- Disproportionate share of ownership requested **17.8%**
Section Three

What does it mean to be «innovative»?

Sources of knowledge, and mechanisms to protect innovation
To what extent do startups actually invest in R&D?

79% of innovative startups reported some expenditure in R&D.

Firms to spend a very significant share of their costs in R&D: on average, 47% of their yearly costs. This is much higher than the minimum threshold provided for by the law to qualify as innovative startup (15%).

- 1 startup in 10 (micro-SMEs) devoted over 80% of their annual costs to R&D activities.
- Conversely, among startups with a yearly turnover above €500,000, 7 in 10 spent less than 40% of their total annual costs in R&D (4 in 10 less than 20%).
To what extent do startups actually invest in R&D?

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Innovative startups invest more than other companies, as confirmed by:

- MISE-InfoCamere data: the rate of fixed assets on total assets is 9x higher for startups than for other limited companies (Dec. 2017)
- Bank of Italy (Finaldi Russo, Magri, Rampazzi 2016): startups invest in particular in intangible assets
What *kind* of innovation?

3 startups in 4 introduced forms of **product innovation**. Slightly more than 1 in 3 – especially the largest – developed forms of **process innovation**.

- **Product innovation**: 74.2%
- **Process innovation**: 37.1%
- **Organisational innovation**: 14.4%
- **Marketing innovation**: 21.3%
- **Other**: 7.3%
What are the effects of innovation?

For 2 startups out of 3, the innovation introduced had effects on the quantitative improvement of products and services that already existed on the market (*incremental innovation*).
Where does innovation come from?

Academic research is mentioned as primary source of knowledge only by 19% of startuppers. Surprising?

This rate is significantly higher in Southern Italy (>25%) than in Northern Italy, in the North-West in particular (14.9%)

The main enabling factor declared by startuppers is hands-on knowledge, resulting from previous professional experience in the industry concerned (61.9%).

previous knowledge of the industry
academic research
other

28
How do startups protect their innovation?

Formal protection tools (IP):

Over half of startups do not hold rights on any form of intellectual property. In Southern Italy this rate is almost 2/3.

- **No formal mechanism**: 58.0%
- **Owner of registered software**: 13.1%
- **Licensee of a patent**: 9.2%
- **Applied for a patent**: 12.8%
- **Owner of a patent**: 17.8%
How do they protect their innovation?

Informal (strategic) protection tools:
They are more common than formal tools. In particular, trade secrets are adopted by almost half of respondents.
How do they protect their innovation?

Informal (strategic) protection tools:
3 startups in 10 (many in the South) do not adopt any form of protection.

Among declared reasons: **non appropriability of innovation (47.9%)**, lack of knowledge of protection strategies (25.7%)
The voice of startups

Awareness, satisfaction and ideas on how to improve the Italian Startup Act
Are startuppers aware of the special measures available to them?

The level of awareness on the different measures is uneven.

**Most known facilitations (over 2 startups in 3):**

- Preferential access to the SME Guarantee Fund
- Tax breaks for equity investors
- Higher flexibility for fixed-term contracts
- Equity crowdfunding

However, a non-negligible share of startups (1 in 5) is aware of some of the measures, but do not know how to use them. This is the case in particular for:

- R&D Tax Credit
- SME Guarantee Fund
- Equity crowdfunding
What are the main sources of information about the Italian Startup Act?

In most cases, accountants.

They are quoted among the most relevant sources of information from more than two thirds of startuppers. Online media and (surprisingly?) Chambers of Commerce follow suit.

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountants</td>
<td>60.2%</td>
</tr>
<tr>
<td>Online media</td>
<td>37.3%</td>
</tr>
<tr>
<td>Chambers of Commerce</td>
<td>22.4%</td>
</tr>
<tr>
<td>Seminars</td>
<td>16.2%</td>
</tr>
<tr>
<td>Consulting</td>
<td>15.5%</td>
</tr>
<tr>
<td>Press</td>
<td>15.3%</td>
</tr>
<tr>
<td>Incubators</td>
<td>14.7%</td>
</tr>
<tr>
<td>Publications</td>
<td>12.1%</td>
</tr>
<tr>
<td>Notaries</td>
<td>11.3%</td>
</tr>
<tr>
<td>Business</td>
<td>11.1%</td>
</tr>
<tr>
<td>Universities</td>
<td>7.2%</td>
</tr>
<tr>
<td>Other</td>
<td>15.9%</td>
</tr>
</tbody>
</table>
What are the main sources of information about the Italian Startup Act?

Lagging behind: business associations and universities

The former are somewhat relevant only for more mature startups. The latter are reported to be the least relevant source of information.
Do startuppers make the most of the ISA? Are they interested in the measures offered?

**Most used measures:**
- Flexible corporate structure for s.r.l. companies (≈LTDs/LLCs) (25%)
- Tax breaks for investors (18.6%)
- Preferential access to the SME Guarantee Fund (18.4%)

**Most interesting measures:**
(not yet used, but will likely be in the future)
- R&D Tax Credit (38%)
- Tax breaks for investors (36.2%)
- Higher flexibility for fixed-term contracts (36%)

**Least interesting measures:**
(startuppers declare to know the measure, but not to be interested in using it)
- Equity crowdfunding (36.5%)
- Smart&Start (31.5%)
- Exemption from regulations on dummy companies (25.4%)
What is the opinion of startups on the measures they used?

Generally positive.
Startups were asked to indicate, on a 0-5 scale, how the measures making up the ISA benefited their entrepreneurial activity.

The measures that got the higher marks are:

- Preferential access to the SME Guarantee Fund 4.33
- R&D Tax Credit 4.33
- Tax credit on qualified personnel 2012-2014 3.80
- Tax breaks for investors 3.72

... 

- Smart&Start 2.84
- Internationalisation services 2.84
The survey also included an open ended question:

“In your opinion, how should the government strengthen the regulatory framework dedicated to innovative startups? On what aspects of corporate life should it intervene?”

The respondents could submit their own policy proposals, inaugurating a participatory process between lawmakers and citizens.

1,044 firms (44.2% of respondents) answered this question.
The suggestions shared by participating startups were very heterogeneous, in terms of both detail and themes covered. They can be classified under **7 main categories**.

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to finance</td>
<td>21.4%</td>
</tr>
<tr>
<td>Tax incentives</td>
<td>24.8%</td>
</tr>
<tr>
<td>Labour law</td>
<td>21.1%</td>
</tr>
<tr>
<td>Funding schemes</td>
<td>19.1%</td>
</tr>
<tr>
<td>Equity &amp; Alt finance</td>
<td>27.9%</td>
</tr>
<tr>
<td>Red tape</td>
<td>18.9%</td>
</tr>
<tr>
<td>Communication</td>
<td>11.5%</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>
The voice of startuppers: how to strengthen the ISA?

The suggestions shared by participating startups were very heterogeneous, in terms of both detail and themes covered.

Many answers appear generic, whereas others contain a truly detailed account of practical experience. In some cases, the answers provided can be considered as genuine policy proposals.

Among the most common:

- **Temporary exemptions** from taxes and social security contributions in the first years of activity
- Introduce more funding initiatives providing **non-repayable grants**
- Avoid “cash-negative” tenders – i.e. financing initiatives in which resources are issued only as a reimbursement of expenses already incurred.
Thank you for your attention!

To know more:
- mise.gov.it
- startup.registroimprese.it
- italiastartupvisa.mise.gov.it

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