Portugal, the best place to Start Up

Startup & Entrepreneurial Ecosystem REPORT 2021
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The role of entrepreneurship as an accelerator of the digital transition and a source of innovation for our economy is unavoidable.

We are aware of the importance of this sector as a source of new, more competitive companies, based on digital business models and qualified human resources.

The ecosystem of startups and scaleups is particularly resilient, agile, and effective in adapting to adverse conjunctures, like the one we go through, thus having the ability to operate on an economic countercycle.

Entrepreneurship can be the catalyst for a faster economic recovery and for a structural change in the European economic model that makes it globally more competitive.

Our vision for the ecosystem is clear and not restricted to our country. The Portuguese presidency of the Council of the European Union aims to mark a new cycle for the European entrepreneurial ecosystem, based on a greater capacity for retention and attraction of startups, talent and investment.

We need a better knowledge of the ecosystem at national and European level, for the benefit of public policy decisions based on objective information.

That’s why this study is so important. We can’t manage what we don’t know.
Foreword by IDC

Welcome to the final edition of the “Startup & Entrepreneurial Ecosystem Report, Portugal 2021”!

The purpose of this study is to provide a comprehensive and in-depth view of the Portuguese startup and entrepreneurial ecosystem. It provides a detailed view of where we are today, who are the major players, what are the key KPIs, how Portugal compares with other nations. It is also the voice of entrepreneurs that chose Portugal as the best place to start-up.

In addition to the number of startups and information about policies, regulation, public incentives, capital, talent, corporations, and key enablers of the ecosystem, this report analyzes key emerging trends, challenges, opportunities, and what is next for the Portuguese ecosystem.

This report was developed based on existing IDC research, public data, a survey carried out among more than one hundred startups founders, and more than 30 in-depth interviews with key ecosystem's stakeholders.

Based on the data and insights provided in this report, we can say Portugal is today one of the nations with the greatest potential for attracting and developing startups and scaleups. There are several aspects related to the ecosystem that can and should be improved, but the growth we have seen in the number of startups, unicorns, existing capital, and talent in the last 5 years has been impressive.

If we add other contextual factors - such as the fact that Portugal is considered the country with the best quality of life in the world, the second friendliest country for foreign investment, and the third safest country worldwide, with one of the best communication's infrastructure in Europe - Portugal is probably one of the best places to startup!
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Our world today

Key market trends & impact of pandemic
The pandemic changes everything

With the accelerating pace of changes, business and technology leaders need to be prepared for disruptions and opportunities.

**TECHNOLOGICAL**
- Increased advantage of real-time data and insights
- Expansion of simulators, digital twin, online learning
- Enhanced roles for 3D printing, robots, and drones

**ENVIRONMENTAL**
- Massive COVID-19 pandemic
- Energy industry disruption
- Global food supply disruption

**LEGAL**
- Agreements and contracts in limbo
- Chained failures, force majeures
- Changing risk and liabilities posture

**BUSINESS**
- Supply chain disruption, new business and operating models
- Sea change in customer expectations, more online, more automation
- Hybrid remote/virtual and safe work mandates

**POLITICAL**
- Instability, unrest, misinformation
- Loss of faith and trust in institutions and leaders
- Increase in nationalism, closed borders, trade wars, shifting alliances

**ECONOMIC**
- Recession, massive unemployment, bankruptcies
- Collapse of demand and supply
- Resource substitution (technology versus people)

**SOCIAL**
- Divisiveness, politicization, uneven impact to further split societies
- Cyberthreats
- Increasing virtual world and social networks

Source: IDC - Critical External Drivers Shaping Global IT and Business Planning, 2021
ACCELERATED DISRUPTION
Crisis, Resilience, and Opportunity

The pandemic has redefined disruption. Survival of the fittest is linked not to size or strength but to resilience and the ability to change — to move quickly, adapt, seize opportunities, and be ready for the next disruption.

THE NEXT NORMAL
Resilient Business and Operating Models

In the post-COVID-19 economy, expected changes in behavior, consumption and supply will force companies to adopt digital-led business and operating models that can survive lockdowns, movement restrictions, social distancing, supply disruptions, and more.

Source: IDC - Critical External Drivers Shaping Global IT and Business Planning, 2021
2021 critical drivers

INTELLIGENCE EVERYWHERE
Data Drives Action

The real-time continuum of applications and data that stretches from edge to network and core, from IoT, mobile devices, and more — combined with historical data, enterprise systems, and global information — continually “sense” an environment and put it into new contexts. AI and machine learning “compute” and spread intelligence to turn data into “action” and action into value.

DIGITAL PLATFORM
Ecosystems at Scale

Understanding and provisioning the platforms that will sustain, advance, and scale business and operations and exert strategic control are essential for every business. A digital platform is the assembly of technologies, capabilities, and data upon which digitally enabled businesses run. The data exchanges, intelligence, and network effect within digital ecosystems generate new value beyond the platform itself.
The COVID-19 pandemic has focused on what customers care about and shifted how consumers and brands engage and interact. Companies with the best price, the coolest product, or the most memorable marketing campaign will not necessarily have an advantage when compared with companies that provide a safe, secure, and seamless experience.

**CUSTOMER ENGAGEMENT REDEFINED**

Safe, Secure, and Sustainable Digital Experience

The COVID-19 pandemic has focused on what customers care about and shifted how consumers and brands engage and interact. Companies with the best price, the coolest product, or the most memorable marketing campaign will not necessarily have an advantage when compared with companies that provide a safe, secure, and seamless experience.

**CRISIS OF TRUST**

Meeting Rising Expectations

The COVID-19 disruption has exposed, accelerated, and introduced new threats to organizations and their assets, increasing noise and dissonance and eroding trust among partners and customers. Meeting expectations of trust and social responsibility become new competitive advantages where “trust = value.”
2021 critical drivers

DIGITAL DIVIDE
The Imperative of Connectivity
Amid social distancing and working from home, access to technology and digital connectivity have become critical. People are learning to socialize, shop, educate, work, and collaborate differently and expect a rich, seamless, and interoperable experience, regardless of where people and data are located. But the digital divide — the gap between those who do or do not have access to technology and the skills to use it — becomes more consequential in people’s ability to complete everyday tasks.

WORK TRANSFORMATION
Redefining Teams, Skills, and Leadership
Technologies are rapidly changing who or what — and where or how — work is being done. The 21st century economy requires workers to operate as agile, dynamic, and reconfigurable teams that can quickly adapt to business demands and new market requirements. Organizations need to rethink their relationship with workers and the creation and retention of skills to meet this demand.

Source: IDC - Critical External Drivers Shaping Global IT and Business Planning, 2021
Impact on the startup ecosystem

The startup and scaleup economy is worth nearly $3 trillion worldwide.

There are now over 500 “unicorns” (scaleups valued at $1 billion or more) globally and Europe is home to over two hundred of them.¹ These unicorns are at the forefront of disrupting financial services, creating solutions to combat climate change, and automating healthcare professionals’ workflows.¹

As the pandemic crisis hit across the world, startups have found themselves being hit hard by two main shockwaves: capital shock and demand.

- Globally, 4 out of 10 startups have three months or less of liquidity (runway), and therefore, may not survive.²
- Venture capital has fallen by about 20% since the beginning of the COVID-19 crisis in December 2019.³
- About 72% of startups saw their revenue drop since the beginning of the crisis, with the average startup experiencing a decline of 32%.⁴
- A study conducted in Portugal found that startups confirm that COVID-19 impacted their activity, mainly due to a decrease in sales and a postponement or delay of projects.⁵

Every crisis creates opportunities, and this crisis is no different. Over half of Fortune 500 companies started during a contraction, and over 50 unicorns were created during the Great Recession.

The current crisis has accelerated the digitization of the offline economy. Tech Economy will be crucial for recovery.

Opportunities are unlocked for companies, they are also unlocked for ecosystems.

This is also a unique opportunity for all of us to rebuild our economic communities with a lower negative impact on the environment and a stronger focus on inclusion and fair access to the amazing value that tech ecosystems create.⁶

According to a study conducted in Portugal about 42.3% of the surveyed startups said that the pandemic generated new opportunities.⁷

¹ Source: Purpose-Driven Start-Ups, Scale-Ups, and COVID-19, IDC 2020
², 3, 5, 7 Source: The Impact Of Covid-19 In The National Startups Ecosystem, Startup Portugal, EY, SAP, 2020
⁴ Source: Startup Genome, The Global Startup Ecosystem Report, 2020
It’s important to start by determining what some of the concepts in this report refer to, as there are many commonly accepted definitions, used loosely, and most of the time they do not match each other.

This effect also leads to the fact that, when comparing data, numbers often refer to different concepts, depending on the source.
A STARTUP ECOSYSTEM is a set of interconnected entrepreneurial actors (both potential and existing), entrepreneurial organizations (e.g., firms, venture capitalists, business angels, and banks), institutions (incubators and accelerators, universities, public sector agencies, and financial bodies), and entrepreneurial processes which formally and informally coalesce to connect, mediate and govern the performance within the local entrepreneurial or startup community environment.

A Startup ecosystem produces Startups, which evolve naturally according to the steps below before turning into a “regular or mainstream” company.

**STARTUP**

A startup is a young company or project, launched by a group of entrepreneurs to create, develop, and/or validate a scalable and repeatable economic model, typically in the form of an innovative product and business model and/or a new market segment. Given its nature and associated uncertainty and risk profile, a specific management framework is usually used to optimise an unfavourable risk-reward ratio, seeking to maximize success probabilities and attain exponential growth through the use of technology.

**SCALEUP**

The following stage in the life of a startup is the scaleup status, after having achieved the elusive product-market fit and with recognizable traction. It is usually defined as a development-stage business, that is growing its market access, revenue, and its number of employees. As with any capital-intensive company, the financing goal for a scaleup is to reward its shareholders, by being acquired either via an M&A, via an IPO or shelling out significant dividends as it becomes profitable.
Companies that have developed a product or service but have not yet achieved breakeven and are still in the process of refining their product/offering and finding their market fit. Companies at this stage typically incur a higher level of cost. They may also begin to generate income, if not profit. They usually receive investments (from their own resources or external funders). There is standard interaction with the tax authorities, including applicable indirect taxes, payroll taxes, and loss relief. Some jurisdictions offer small companies simplified tax systems based on turnover rather than profit. Selling equity stakes implies capital gains taxation for investors, whilst funding this high-risk, early growth.

**STARTUPS** are also commonly defined as being in different stages, which reflect different immediate goals and require different incentives, capital and risk management.

**PRE-SEED**

Companies that are formally set up or are in the process of doing so, but are at a very early stage in development. They typically start by researching, assessing or developing an initial idea or concept before reaching the formal start up process and launching an MVP (Minimum Viable Product). Companies at this stage typically incur cost only and do not generate revenues, though most receive an investment (from own resources or external funders). There is minimal need for interaction with the tax authority, aside from loss relief and payroll taxes. Selling equity stakes implies capital gains taxation for investors, whilst funding this high-risk, early growth.

**EARLY STAGE AND SEED**

Companies that have developed a product or service but have not yet achieved breakeven and are still in the process of refining their product/offering and finding their market fit. Companies at this stage typically incur a higher level of cost. They may also begin to generate income, if not profit. They usually receive investments (from their own resources or external funders). There is standard interaction with the tax authorities, including applicable indirect taxes, payroll taxes, and loss relief. Some jurisdictions offer small companies simplified tax systems based on turnover rather than profit. Selling equity stakes implies capital gains taxation for investors, whilst funding this high-risk, early growth.

**GROWTH/SCALEUP**

Companies with the scope to scale up and internationalise their activities, having found significant and scalable traction. Companies at this stage may be liable for personal or corporate income taxes on profits, as well as indirect and payroll taxes. Selling equity stakes implies capital gains taxation for investors, whilst funding this much lower risk, mature growth. Additionally traditional funding methods such as loans and venture debt become available, as revenues stabilize.
Capital

CAPITAL is a key ingredient in the ecosystem, as it allows different actors to invest and develop the business, generating a multiplier effect. Capital is defined as a lot more than strictly money, as startups often lack some of the skills required to develop (business management, sales, manage for scale, access to people and markets, ...)

As Startups traverse their own life cycle, capital requirements change and different entities play key roles at each stage.

Definitions

CARET CAPITAL (CVC) is the practice of directly investing corporate funds into external startup companies. This is usually done by large companies who wish to invest in small, but innovative, startup firms. They do so through joint venture agreements and the acquisition of equity stakes. The investing company may also provide the startup with management and marketing expertise, strategic direction, and/or a line of credit.

BUSINESS ANGEL (BA) is a private individual, often with a high net-worth, and usually with business experience, who directly invest part of their assets in new and growing private businesses. Business angels can invest individually or as part of a syndicate where one angel typically takes the lead role.

PUBLIC VENTURE CAPITAL (PVC) is governmental funding agencies and/or financial players. Public VCs can contribute decisively to close the funding gap of startups in different moments. At the very early stage, as private investors usually tend to avoid projects with a high level risk and uncertainty. And at a later stage, providing liquidity in the growth stage. They typically chose to co-invest with private capital, therefore minimizing their own risk and contributing to a win-win situation for all the involved parties.

The Venture Capital (VC) is professional private investors, typically organized in funds, that provide capital to companies with high growth potential in exchange for an equity stake. This could amount to funding startup ventures or supporting small companies that wish to expand but do not have access to equity markets.

PRE-SEED AND SEED

EARLY STAGE

GROWTH/SCALEUP
Incubators and accelerators help startups succeed by providing mentorship, guidance, training, strategy, partnerships, R&D, and funding. They are instrumental in getting startups, especially early-stage ones, off the ground. Having access to an accelerator's resources and network can make or break a startup that hasn't cemented itself within the ecosystem.

**INCUBATORS**
Are public and private organizations that offer structured or customized, relatively long-term, support to early-stage startups.

**ACCELERATORS**
Are public and private organizations that provide an intense, structured short-term program to induce startups' rapid progression.

**OTHER SUPPORT PROGRAMS**
Include all the entrepreneurial support initiatives that do not fall in the above categories. They may be short-term (usually two days to one week) programs offering more strategic support and include competitions, boot camps, events, seminars, and capacity-building workshops. Or they may be public support startup incentives (usually provided by public agencies) as policy measures to foster entrepreneurship.

Catalysts & Enablers support and help entrepreneurs and innovators succeed. They generally provide ongoing, diversified entrepreneurial support through offline and online activities tailored to the startups' needs. Relevant to this context are **incubators, accelerators** and other support programs.

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Other catalysts

OTHER TYPES OF CATALYSTS AND ENABLERS CAN INCLUDE:

COWORKING SPACES
Shared offices where startups can rent hot desks or private offices with no long-term commitment. Flexibility is not the only reason why startups choose to join coworking spaces. Most importantly, coworking spaces have their own communities and often organize events where entrepreneurs can expand their network and explore potential collaborations with other companies. Startups based in a coworking space often have the freelancer they need within arm’s reach, and if not, there’s someone who knows someone who knows someone.

MENTORSHIP
Advisory organizations and mentors can help founders during their entrepreneurial journeys in many ways. Experienced, successful mentors help you stay accountable and loyal to your vision. Their own experience in business is often critical to succeed. They can help you prepare for the future and offer unbiased opinions on critical situations.

EVENTS
The heart and soul of every startup ecosystem is its community of people. Its potential, knowledge, links, and skills. And people have to be brought together to form a community. Conferences, workshops, meetups, networking events, and parties are crucial to building and maintaining a startup ecosystem. Without events, no ecosystem can survive for long.
Where are we today?

A snapshot of the ecosystems
The Portuguese startup ecosystem is still young, but it’s one of the best assets Portugal has, with small-scale but fast-paced and steadily growing companies representing over 1% of the country’s GDP.

- 12th Top 100 Emerging Ecosystem Ranking
  Startup Genome

- 12th most innovative EU country
  Innovation Scoreboard EU

Source: startupportugal.com/blog/tag/Government-support
The ecosystem at a glance

Where are we today?

A non-exhaustive list of companies and institutions playing in the Portuguese Startup Ecosystem.
Where are we today?

Startups
Scaleups
The odds of becoming a unicorn

LET'S CUT THROUGH THE CHASE. STARTUPS ARE RISKY BUSINESS, AND THE ODDS ARE NOT VERY INTERESTING...

And curiously, odds are slightly better in Europe than in the USA

1 IN A 100...

1.22
EUROPE

1.07
UNITED STATES

% of companies

The European Unicorn list is a very limited one, with only 208 companies:

And Portugal has already produced 4:

- Farfetch: $22B
- Outsystems: $9.5B
- Talkdesk: $3B
- Feedzai: $1.3B

With some others lining up, like:

Sources: Dealroom.co
data excludes: biotech, secondary transactions, debt, lending capital, and grants, and Israel.
Portugal is a fashionable place, not only as a travel destination, but also as a tech place.

Quality of life, the sun and sea, cost of labour, and specialized talent have obviously something to do with it, but there is significant progress on the development of the startup ecosystem.

It has become a highlight in the European startup scene, especially after hosting the WebSummit in 2016, putting the country on the map as one of the hippest places to be in.

The arrival of international and experienced capital, together with the maturing of local investors has also attracted the attention of some talented engineers with a global mindset.

**Startups in Portugal**

**STARTUP PORTUGAL HAS BEEN DOCUMENTING PROGRESS, AND THE CURRENT ESTIMATION POINTS TO:**

~ **2,159 STARTUPS in Portugal in 2020**

*Which is 13% above the average number of startups per capita in Europe: 190 (per million inhabitants).*

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1 Source: Startupportugal.com; 2 Source: Dealroom.co
The portuguese startup profile

with a small domestic market, Portuguese startups have no alternative than looking to international markets, specially the European Market, taking advantage of the open economic zone. Some startups even prioritize USA markets in their business plans and are born global.

1 Source: EU Startup Monitor Project (2019)
2 Source: startupportugal.com
A LOOK AT THE SPLIT OF PORTUGUESE STARTUPS PER STAGE SHOWS THAT THERE IS MORE EMPHASIS AT AN EARLY STAGE.

IT IS A YOUNGER ECOSYSTEM THAN THE AVERAGE EUROPEAN ONE.

Source: Statista 2018
Regional startup split

A VIEW AT THE SPLIT BY REGION SHOWS:

- Vibrant ecosystem in the North and Center, aggregating hubs like Porto, Braga and Aveiro. With Porto waging in 19%.
- Coimbra is also a key-hub in the Center region.
- Lisbon account for 18% of the total.
- There are a lot of development opportunities in the islands of Azores and Madeira, and their potential for sea-related activities could be easily leveraged.
- Portugal is a very interesting place to startup.
Where are we today?

An analysis of the split by industry confirms the commonly held notion that the ecosystem is geared towards technology and B2B.

A mention to fintechs, with almost 10% of share, followed by health sciences with 8%.

Plenty of growth opportunity in sustainability and agrotech.

Source: StartupPortugal.com
ANOTHER INTERESTING PERSPECTIVE IS TO LOOK AT THE PICTURE FURTHER DOWN THE LINE, IN TERMS OF SCALEUPS

In fact, today’s scaleups are yesterday’s startups, and among the top 25 there is a clear bias towards B2B, though there is a stronger skew towards Consumer & Web, if compared to today’s startup image.

Source: Scaleup Portugal 2020 report
AN INTERESTING DATA POINT ALSO AVAILABLE FOR THE TOP 25 SCALEUPS IS THEIR BUSINESS MODELS:

- A significantly vast majority is subscription-based, following the current X as a service trends.
- 17% characterize themselves as marketplaces, offering additional challenges when bootstrapping.
- Only 4% relates to manufacturing, which stresses the digital nature of today’s world.

Source: Scaleup Portugal 2020 report
Enablers

Where are we today?
Portugal: great place to travel, live and invest

Portugal is known for its climate, beaches, gastronomy and tradition, receiving many tourists every year. In recent years, Portugal has been improving and promoting what it has to offer and is today a modern, eclectic and welcoming country, attracting not only different types of tourists but also families and companies that establish their life and business in the territory.

Portugal was World’s Leading Destination 2017, 2018, 2019 and Europe’s Leading Destination 2020 World Travel Awards

Portugal was the 1st in quality of life for expats, 2019

Lisbon was the 3rd best city for expats, 2020 Expat Insider survey

Portugal ranked 3rd most peaceful country in the world, among 163 states and territories. Global Peace Index, 2020

Portugal was the 2nd most open country for “foreign direct investment” (FDI) OECD FDI restrictiveness index, 2019

Portugal ranked #25 out of 161 in “The Best Countries for Business”, Forbes, 2019

Portugal considered strong innovator by the European Commission European Innovation Scoreboard 2020

Portugal ranked 3rd most peaceful country in the world, among 163 states and territories. Global Peace Index, 2020

Where are we today?
Enablers

Instituto de Economia
& Peace

OECD

Expat Insider survey

Forbes, 2019

European Innovation Scoreboard 2020

OECD FDI restrictiveness index, 2019
Great location

MAINLAND PORTUGAL IS LOCATED IN THE MOST SOUTH-WESTERN POINT OF CONTINENTAL EUROPE, ENSURING AN IMPORTANT GEO-STRATEGIC POSITION BETWEEN EUROPE, AMERICA AND AFRICA.

Nearest European country to the US and Canada

Same time zone as UK and Ireland

1 hour difference from Central European time

Where are we today?

Enablers

Bridge to Portuguese-speaking markets

260 million people

Access to European markets

500 million people

Source: AICEP, 2020
Good means of transport across the country and to the world

#21
IN THE WORLD WITH BETTER INFRASTRUCTURES
(The Global Competitiveness Report 2019, 141 countries).

#8
QUALITY OF ROAD INFRASTRUCTURE
3065 kilometers in motorway length. Portugal is the EU Member State with the 2nd best roads of all 28 countries according to the EU Transport Scoreboard.

#31
RAILROAD DENSITY
Railway network is available through 2546 kilometers of the country. All main seaports are connected to the rail network onwards to Spain and Central Europe.

#36
EFFICIENCY OF SEAPORT SERVICES
6 major international seaports.

Source: AICEP, 2020
Portugal is above EU average in connectivity score

It has very good VHCN broadband coverage and good fast broadband (NGA) coverage.

Mobile 4G coverage has reached 96%, at the same level as EU average.

As regards 5G, several 5G trials are underway in the cities Aveiro, Cascais, Évora, Porto, Matosinhos, Lisbon. The multi-band auction is in progress. The licences will be distributed during 1stQt 2021.

Source: Broadband Coverage in Europe 2019, a study by IHS Markit, Omdia and Point Topic for the European Commission.
Portugal is actively promoting the digitalization of businesses

PORTUGAL IS ACTIVELY IMPLEMENTING MEASURES TO PROMOTE THE DIGITALIZATION OF BUSINESSES AND PUBLIC SERVICES.

Some examples are:

- **Strategy ICT 2020**, promoting the digital transformation of public services.
- A revamped edition of the flagship programme on administrative simplification **SIMPLEX**.
- **Web portal ePortugal**, a central repository for all public services dedicated to citizens and businesses.
- **Mobile Medical Electronic Prescription**, enabling doctors to digitally prescribe medicines through a smartphone.
- **Social Security +** provides an easier and simpler way for citizens and companies to access social security services.
- **Industry 4.0**, national strategy for the digitalization of the economy.
- **ComércioDigital.pt**, promoting the presence of SMEs in e-commerce and digital services.
- **Digital innovation hubs** (DIH), an instrument for scaling up the digitalization of companies, particularly of SMEs.
- **Artificial Intelligence Portugal 2030** which aims to put Portugal at the forefront of ‘AI Education for all’.
- **Advanced Computing Portugal 2030** which aims to expand cyberinfrastructure and to improve advanced computing skills.

Source: Eurostat
Incubators/accelerators

Incubators are the institutions that have most contributed to the development and dynamism of the Portuguese business community, with an effective role in the survival rate of ideas and innovative startups.

The “National Network of incubators” was created as part of the Startup Portugal Strategy. Its role is to promote cooperation and the sharing of resources and knowledge, in order to improve products and services made available to entrepreneurs and companies.

From 2016 to 2020, the number of incubators grew by 40%.

169 incubators distributed across the country offer 2325 incubator rooms.

<table>
<thead>
<tr>
<th>Nº OF INCUBATORS</th>
<th>Nº OF INCUBATOR ROOMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>121</td>
<td>2,178</td>
</tr>
<tr>
<td>2016</td>
<td>2016</td>
</tr>
<tr>
<td>169</td>
<td>2,325</td>
</tr>
<tr>
<td>2020</td>
<td>2020</td>
</tr>
</tbody>
</table>

Source: RNI, Portuguese Incubators Monitor, 2020

Where are we today?

Enablers

Startup Lisboa began its activity in February 2012. It facilitates access to investment, mentors, strategic partners and potential customers. It is also running two acceleration programs to innovate the communication and media industry and to reshape the ecosystem of restaurants.

“Fábrica de Startups” is an incubator and has several accelerator programs for startups. It is also a connection point between Portugal, Brazil, and Macao. Since 2012 more than 2500 entrepreneurs have worked with its methodologies of creation, validation and growth of ideas.

Startup Braga supports new technology-based companies in the areas of digital economy, medical technologies and nanotechnology, through pre-acceleration, acceleration and incubation programs. In partnership with Microsoft Ventures it provides business acceleration programs for startups with global ambitions.

UPTEC supports the transfer of knowledge between the university and the market, by fostering the creation of technological, scientific and creative companies and attracting innovation centers of national and international companies.

Operating since 2010, BGI has accelerated 154 new ventures, with a survival rate to date of 60.4%. It provides opportunities to deep tech startups via venture financing, connecting innovators with global investors, and acceleration programs.

Demium Startups was founded in 2013, having started operations in Portugal in 2019. It is an incubator and helps entrepreneurs to create a startup from scratch. It supports the overall cycle and the international expansion.

Fintech House is a hub for Fintech, Insurtech, Regtech, and Cybersecurity in Portugal. It is the physical arm of the Portugal Fintech Association. The House provides access to regulators, talent, capital, partners or potential clients.
Incubators / accelerators offer a variety of services

A LARGE NUMBER OF STARTUPS DO NOT REQUIRE A PHYSICAL OFFICE AND OPT FOR A DIGITAL INCUBATION.

DISTRIBUTION OF INCUBATED STARTUPS BY SERVICE MODEL

In addition to the typical amenities for startups, there is a wide range of services for startup and growing companies, ranging from co-working spaces to support services for product development and marketing.

% OF INCUBATORS DELIVERING THE SERVICE

- Business model support: 92%
- Networking and events: 88%
- Funding support: 88%
- Communication support: 78%
- Marketing support: 71%
- Juridical support: 65%
- Account support: 54%
- Acceleration program: 50%
- Free pre-incubation: 45%
- Prototyping support: 41%

Source: RNI, Portuguese Incubators Monitor, 2020
Where are we today?

Policy, Regulation & Incentives
Incentives welcome foreign investment

GENERAL INCENTIVES FOR INVESTMENT:

GOLDEN VISA PROGRAMME
Residency-by-investment program in a bid to push more foreign investors towards low residency regions.

PRODUCTIVE INVESTMENT
Financial and tax incentives for new products, services or processes and innovation.

R&D INVESTMENT
Financial incentives for investment in R&D activities.

JOB CREATION INVESTMENTS
Financial support to internships for unemployed graduated young people and for long-time unemployed people.

COMPETE 2020
Program also available for foreign investment. Incentives to projects based on knowledge intensive activities, transportable or internationalizable goods and services and to enhance the qualification and export orientation.

#39
in General Ranking

#1
Trading Across Borders

THE WORLD BANK

DOING BUSINESS
Measuring Business Regulations
190 countries

#31
in General Ranking

#24
Institutions

GLOBAL INNOVATION INDEX 2020

Global Innovation Index
131 countries
Incentives and support to startups

ECONOMIC RELIEF
MEASURES TO HELP THE STARTUP ECOSYSTEM

- **MEZZANINE FUNDING FOR STARTUPS (INNOV-ID)** Designed to protect startups that have benefited from investment. A loan convertible into “social capital (supplies)” after 12 months, applying a discount rate that allows startups to avoid a dilution of investors’ equity.

- **E-RESIDENCY 2.0** The e-residency 2.0 is a program for digital nomads and entrepreneurs without a fixed base. Allows the creation of an on-line company, while granting access to public and private services in Portugal. (Under development)

- **ZLT** (Free zones for technology) The ZLTs facilitates the realization of research, demonstration and testing activities, in a real environment, of innovative technologies, products, services, processes and models. (ongoing)

- **MISSIONS ABROAD** An initiative to further promote Portuguese startups abroad. In past missions, StartupPortugal took Portuguese startups to either participate in a tech event, to meet investors and important players, to visit incubators and other important local tech hubs, or to help Portuguese companies with recruitment processes in foreign countries.

- **SEMENTE** A program developed to encourage small private investors to invest on innovative startups. It encourages innovation and the creation and growth of entrepreneurial projects, yielding tax breaks for investments on certified startups.

- **STARTUP VOUCHER** Program for young entrepreneurs in idea stage. It aims to reduce the risks youngsters take in venturing and creating a company by granting a scholarship, incubation and mentorship.

- **TECH VISA** Tech Visa is a certification program addressed to companies that wish to attract highly qualified and specialized staff to Portugal, nationals from countries not included in the Schengen area. IAPMEI is responsible for the evaluation and certification of companies.

- **ROAD2WEB Summit** An initiative designed to support Portugal-based startups with their web summit participation. It includes access access to the event and intensive training.

- **OPERATION FOLLOW-ONS** To be carried out together with Portugal Ventures’ Capital Partners Network, it aims at shoring up the capital of startups already backed by other investors. Financial initiative through the Financial Development Institution (IFD), Portugal Ventures and Imprensa Nacional-Casa da Moeda.

- **STARTUP VISA** It aims to attract investment, talent and innovation to Portugal. Young entrepreneurs from all over the world who want to open an innovative company will have quick access to a residence visa that gives them the possibility to create or move a their startup enterprise to Portugal.

- **INCUBATION VOUCHER** This measure is intended to provide support for simplified projects of companies in the area of entrepreneurship by contracting incubation services provided by of previously certified incubators.

- **ZOOM** The 200m co-investment fund, managed by PME Investimentos – a public company regulated by the Bank of Portugal – whose mission is to develop innovative funding instruments for Portuguese companies.

- **E-RESIDENCY 2.0** The e-residency 2.0 is a program for digital nomads and entrepreneurs without a fixed base. Allows the creation of an on-line company, while granting access to public and private services in Portugal. (Under development)
No restrictions to foreign capital entry

FOREIGN INVESTMENT RULES FOLLOW PRINCIPLES OF FREE ESTABLISHMENT AND NON-DISCRIMINATION.

In Portugal there are no restrictions to foreign capital entry, for regulatory framework says no one can be discriminated on the grounds of nationality. In that way, the rules applicable to foreign investment are similar to those applicable to domestic investment, and no special registration or notification is required of any authority in this case. All the steps that are needed in order to invest in Portugal are now much simpler.

BUSINESS FACILITATION

Simplex: measures taken to reduce bureaucracy
Empresa na Hora: (“Business in an Hour”) program that facilitates company incorporation by citizens and non-citizens in less than 60 minutes. In 2007, the Government established AICEP, an agency to promote foreign investment and trade that also manages industrial parks.

COMPETITION AND ANTI-TRUST LAWS

Portuguese law specifically prohibits collusion between companies to fix prices, limit supplies, share markets or sources of supply, discriminate in transactions, or force unrelated obligations on other parties.

TRANSPARENCY OF THE REGULATORY SYSTEM

Legal, regulatory, and accounting systems are consistent with international norms. Rule-making and regulatory authorities exist across sectors including energy, telecommunications, security markets, finance and health.

INTELLECTUAL PROPERTY RIGHTS

Intellectual property rights (IPR) infringement and theft are not common in Portugal. It is fairly easy for investors to register copyrights, industrial property, patents, and designs with Portugal’s Institute of Industrial Property (INPI) and the Inspectorate-General of Cultural Activities (IGAC). Portugal is one of the countries with lower patent costs (online and offline).
Worker’s earnings and taxes

In recent years labor legislation has changed and was adapted in order to simplify and give some flexibility to the labor market. Some aspects of the contracts are now different, helping companies to reduce costs with their workers:

- **Monthly national minimum salary (2020):** 665€

- **Monthly base salary:** The gross amount, paid regularly and corresponding to the normal working period.

- **Monthly earnings:** The gross amount paid monthly, on a regular basis, for the hours of work performed, as well as for the hours paid but not actually worked. This includes, in addition to the basic pay, all premiums and regular grants (seniority bonuses, allowances for function, food, housing, transportation, seniority, productivity, attendance, shift, timetable exemption, arduous or hazardous work, etc.), as well as payment for overtime.

**Incentives and benefits to promote contracts and the employment of specific worker groups:**
- creation of new job vacancies
- hiring long-term unemployed
- young people looking for the first job
- recruitment of disabled workers

**Tax benefits for job creation,** reducing the amount of discounts the employers and employees have to do.

**IR Steven Tax (Personnel Income Tax):** tributes all annual value of the citizens’ income. The rates vary between 14.5% and 48%.

**APPLICABLE RATES**  | **VALUE/AMOUNT**  | **TYPE**
---|---|---
Base Salary x14 (Holidays and Christmas Bonuses) | | 
Meal Allowance x11 | 4.77€/day of work | Reference amount for the public sector
Work Insurance x14 | 1% of base salary (indicative amount) | Mandatory
Social Security - Employer Contribution | 23.75% of the base salary | Mandatory
Working Compensation Fund x12 | 1% of the base salary | Mandatory
Social Security - Employee Contribution | 11% of the base salary | Mandatory
Where are we today?

Talent
Portugal in global rankings

PORTUGUESE TALENT IS RECOGNIZED FOR ITS QUALIFICATIONS, FLEXIBILITY AND COMMITMENT.

WORLD TALENT RANKING, 2020

#26 out of 63 countries

#12 Management Education

#7 Language Skills

#14 University Education

Source: IMD World Competitiveness Center

GLOBAL TALENT COMPETITIVENESS INDEX

#28 out of 132 countries

Source: INSEAD, the Adecco Group, and Google Inc.

ENGLISH PROFICIENCY INDEX, 2020

#7 out of 88 countries
- High Proficiency

Source: Education First

GLOBAL INNOVATION INDEX, 2020

#32 out of 131 countries

#29 Knowledge Creation

#14 Knowledge Impact

Source: Cornell University, INSEAD, and the World Intellectual Property Organization
Higher education has been growing

The Portuguese school system has witnessed historic improvements in access, attainment and performance over the past 20 years. In 2020, 28% of the Portuguese population between 25 to 64 years old had higher education. This rate increased considerably to 42%, in a 25 to 34 years old population.

28% of students graduated in the areas of Sciences, ICT and Engineering.

Source: www.ine.pt; data updated on September 2020

S&T refers to: “Natural sciences, mathematics and statistics”, “Information and Communication Technologies (ICTs)” and “Engineering, manufacturing and construction”
The importance of higher education in startups/scaleups

THE PEOPLE BEHIND PORTUGUESE STARTUPS AND TOP SCALEUPS ARE HIGHLY QUALIFIED WITH THE MAJORITY OF THEM HOLDING AT LEAST A MASTER’S DEGREE.
PORTUGAL EMBRACES DIVERSITY AND INTERNATIONAL ENVIRONMENTS

Over the last five years, the number of foreign students choosing Portugal as their destination has significantly risen. The majority come from Brazil, but European countries are well represented, like Germany and Italy. Also, people from African countries like Cape Verdeans and Angolans are choosing Portugal to get a diploma. This has been shaping the higher education and science landscape into an open, multicultural and international environment over the last years. The number of foreign graduates in 2019 increased 17% over the previous year. The number of enrolled students continued to grow in 2020.

Source: www.ine.pt; data updated on September 2020
ICT skills are being built, in tertiary education and other programs

**SOME INNOVATIVE PROGRAMS HAVE EMERGED TO PREPARE WORKERS FOR A ROLE IN ICT**

**UPSKILL PROJECT – DIGITAL SKILLS & JOBS**
Upskill project, launched in 2020, is the outcome of a joint initiative between an industry association (APDC), the Public Employment Office (IEFP) and partner universities. The 9-month courses aim to address ICT skills gaps identified by IT companies in Portugal and will take place at different higher education institutions across the country. Java, .NET, Python, Cloud, Salesforce and Outsystems are some of the courses covered under this Programme, corresponding to the skills areas where demand is strongest.

**42 LISBOA – PROGRAMMING SCHOOL**
Founded in Paris in 2013, 42 Lisboa is a programming school operating in more than 20 countries, being recognized as one of the best programming schools in the world. A 42 school was opened in Lisbon in 2020. 42 is not a traditional school. It is free of charge, and it doesn’t require any academic degree or coding experience. The school has a practical approach, based on peer-to-peer collaboration.

**A BUNCH OF GOVERNMENTAL MEASURES ARE IN PLACE AIMING THE DEVELOPMENT OF A DIGITAL SOCIETY**

Portugal adopted the “Action Plan for Digital Transition” with the purpose of accelerating the country’s digitalization. One of the pillars encompasses a measure for “Capacity building and digital inclusion” that specifically addresses: 1) Digital education; 2) Professional training and reskilling and 3) Digital inclusion and literacy.

The Portuguese government established the “National Digital Competences Initiative e.2030”, an integrated public policy to enhance and foster digital competences. One of its action-lines focuses on promoting specialization in digital technologies and applications to improve employability and create higher added value in the economy.
In 2019, average hourly labor costs were estimated at EUR 28.2. However, this average masks sizeable gaps between EU member-states, with hourly labour costs ranging between EUR 6.0 and EUR 44.7.

Portuguese labor cost is around 50% of the average cost.

Between 2018 and 2019, hourly labor costs in the whole economy expressed in euro rose by 2.9% in the EU and by 2.5% in the euro area.
Where are we today?

Knowledge
Universities

PORTUGAL HAS A WIDE RANGE OF EDUCATIONAL INSTITUTIONS AND COURSES IN THE AREAS OF SCIENCES AND TECHNOLOGY

Tertiary educational institutions are divided into universities and polytechnics. The main difference between the two is that the universities have a greater focus on academic research, while the polytechnics are more focused on preparing students for a specific career path.

In 2020 there were 123 universities and 161 polytechnics in Portugal.¹

There are around 771 higher education courses in 135 schools, in the areas of Sciences, Mathematics and Information Technology. 91 courses in 45 schools in the areas of Engineering of Information Technology.²

Business Schools are internationally recognized, with two schools ranking as the top 25 best full-time MBAs in Europe.³

¹, ²: Sources: DGEEC, 2020 and DGES
³: Source: The Financial Times

Times Higher Education World University Rankings 2021 (1500 Universities)

<table>
<thead>
<tr>
<th>University</th>
<th>Rank</th>
<th>Nº of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universidade de Oporto</td>
<td>#351-400</td>
<td>11 187</td>
</tr>
<tr>
<td>Nova</td>
<td>#351-400</td>
<td>19 976</td>
</tr>
<tr>
<td>University of Porto</td>
<td>#401-500</td>
<td>32 586</td>
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<tr>
<td>Lisboa</td>
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<tr>
<td>Universidade de Aveiro</td>
<td>#601-800</td>
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</tr>
<tr>
<td>University of Coimbra</td>
<td>#601-800</td>
<td>7 180</td>
</tr>
<tr>
<td>ISCTE</td>
<td>#601-800</td>
<td>21 332</td>
</tr>
<tr>
<td>Universidade de Lisboa</td>
<td>#601-800</td>
<td>8 868</td>
</tr>
</tbody>
</table>

Some of the Portuguese Universities included in “The World University Ranking”
Research & development

HIGH GROWTH OF EXPENDITURES ON R&D. ENGINEERING SCIENCES AND TECHNOLOGIES TAKE THE BIGGEST SLICE

EXPENDITURE ON RESEARCH & DEVELOPMENT

Source: DGEEC, 2021

EXPENDITURE ON RESEARCH & DEVELOPMENT BY FIELD OF RESEARCH, 2019, MILLIONS €

- Engineering, Sciences and Technologies: 3,555
- Exact Sciences: 426
- Medical and Health Sciences: 373
- Social Sciences: 318
- Natural Sciences: 264
- Humanities and Arts: 157
- Agrarian and Veterinary Sciences: 99

Source: DGEEC, 2020
Entrepreneurship and Academia

Apart from enabling people with the required specific and technical skillset, Academia also plays an important role in teaching entrepreneurship and innovation as a domain in itself.

The formal academic offer shows:

- 59 courses, in between PhDs, Masters’, or undergraduate programs, dedicated to Entrepreneurship and/or Innovation
- Throughout 32 institutions (universities, polytechnics, public, and private)
- With a geographically evenly spread distribution in the country

Also worth mentioning the 8 programs dedicated to Social, Impact, and/or Sustainability.

Equally important are the connections to the rest of the value chain, actually bridging the gap between students and other ecosystem stakeholders.

Most universities and polytechnics, if not all, have specific offices or bureaus to serve the purpose, organizing contests, hackathons, events or other specific activities to generate interest and rally students.

As an example, Universidade Católica’s Center for Technological Innovation & Entrepreneurship serves as a link between students (and academia) and the ecosystem, with a rich agenda, such as:

- The Forward program, a pre-acceleration program to support teams to go through the ideation phase.
- Women Entrepreneurship Award, recognizing their work and incentivize other women to launch their own business.

Some corporates also play relevant roles. As an example, Santander supports Portuguese Academia (over 50 entities) and over 4,000 students through a specific 5,7m€ program in grants, internships and prizes, covering: teaching entrepreneurship skills, supporting new projects and employability support.

The bank has a specific policy of promoting participation in international competitions (Santander X Tomorrow Challenge, which allocates 1m€ to 20 projects) and Academies (European Innovation Academy, a 3 week immersion program), startup development training (like Explorer Program or Santander Poliempreende), Innovation Challenges, and Research prizes.

There is also a relevant social impact entrepreneurship angle, with several specific training courses and contests (Uni.Covid-19 has awarded a total of 30k€ to 14 new projects).
Research & development

 ENTERPRISES PLAY A BIG ROLE IN KNOWLEDGE DEVELOPMENT

EXPENDITURE ON RESEARCH & DEVELOPMENT BY SECTOR OF PERFORMANCE

PERSONS EMPLOYED AT FULL-TIME EQUIVALENT (FTE) IN R&D

Sources: DGEEC, 2021

TOP ENTERPRISES WITH HIGHER SPENDING ON R&D, 2019
Where are we today?

Corporations
Corporations are an interested party in the ecosystem

Corporations often look at young, agile and innovative startups as:

- a way of experimenting and innovating outside their own boundaries and constraints
- a source of, and funnel for, products that can be incorporated in their offer and add significant value to their customer value propositions
- a way of differentiating themselves in their native markets
- a source of talent and human capital.

Partners:
Helping in the product development and providing value along the lifecycle, or, if not, just by reselling it.

Customers:
Consuming products and services in their value chains and providing a more predictable or friendlier source of revenue, access to markets, or volume.

Investors:
Establishing corporate venture capital arms, with a similar behaviour to other VCs being a source of “exits”, effectively running startup or scaleup acquisition processes, thus providing liquidity to the ecosystem.

Sponsors:
As active innovation seekers, launching innovation challenges and sponsoring ecosystems development activities that foster development, like hackathons of events.
Some local initiatives supporting entrepreneurship

**CTT**

Within the scope of its innovation policy and support of the national ecosystem, has launched a startup technological challenge in order to accelerate its own digital transformation in mail handling.

CTT has created an investment fund to support Small and Medium Businesses and Startup development, reinforcing its connection to the innovation ecosystem.

The fund will invest 4m€ in startups (seed, series A and growth), in sectors aligned with CTT’s priorities, namely e-commerce, operations & logistics, communication, fintech, retail and advertising.

**EDP**

EDP invests highest value ever in startups in the areas of digital innovation, electric mobility and smart grids and announces first exit.

The priority areas for investment are aligned with EDP group’s business and are divided between clean energies, energy storage solutions, smart grids, digital innovation and solutions related to customers.

Corporate VCs can support startups very effectively, being their first customer, being their first reference that can then be used to acquire new customers and strategic focus in accelerating startup development.

**Semapa Next**

Techstars, the worldwide network that helps entrepreneurs succeed, and Semapa Next, the venture capital business unit of the Semapa Group, are partnering to bring a new mentorship-driven accelerator program to Lisbon, Portugal.

The program will focus on companies that are solving problems in manufacturing, transportation, logistics, sustainability, and travel and leisure. The companies that have been selected to join us for this year’s program in Lisbon are coming from the U.S., U.K., Australia, Germany, France, Slovenia, Singapore, and Portugal.

**Bial**

Established health companies are looking for startups with ideas, who want to test and develop a new technology based product.

The group bets on Research & Development and Innovation to produce and develop the only 2 Portuguese medicines, since 1924.
Large portuguese companies investing in startups

Galp invites startups and technology companies to present solutions and enable and enhance the decentralized production of energy, with particular focus on self-consumption.

Galp will create a new innovation facility in 2020. UP – Upcoming Energies is the name of the project which will be launched in January, based in Lisbon, and very much focused in searching for solutions for the axes of energy transition, mobility, digital and circular economy.

NOS launched a 10m€ investment fund to stimulate research and development in the use of 5G by the community of entrepreneurs in Portugal.

The 5G Accelerator - Collaborative innovation programme is an initiative by NOS and AWS (Amazon Web Services), in partnership with Startup Lisboa, to accelerate 5G transformation and innovation in Portugal. To this end, it will select the most daring startups committed to placing new solutions based on 5G on the market or boosting their current business models through the application of this technology.

Sonae MC seeks startups with technology for retail through BrightPixel and Sonae MC, Maia’s group integrates Reach consortium with a total budget of 3,5m€.

Once again, Sonae was distinguished by the European Commission as one of the best European companies working with startups. The multinational made the exclusive list of companies classified as “Open Innovation Challengers”, by the Startup Europe Partnership on behalf of the European Commission.
Portugal on the radar of multinationals

Companies from all over the world choose Portugal to install business services centers: shared services centers, competence centers and business process outsourcing.

Around 140 companies have installed about 158 service centers in Portugal. 92% are from foreign companies.

Global business services and competence centers are driving innovation and efficiency and already play an important role in Portuguese economy.

**Where are we today?**

- **Corporations**

- **Cap Gemini, Fujitsu, Atlas, Embraer**

- **Madeira & Azores**

- **Lisbon**
  - Altran, Bosch, Faurecia, Yazaki, IBM, La Redoute, Blue-Infinity, Alcira Labs, Teleperformance, Randstad.

- **Center**

- **Porto & North**

- **Alentejo & Algarve**

Source: AICEP, 2019
Portugal on the radar of multinationals

MAJOR COMPANIES ARE INVESTING AND MOVING TO PORTUGAL

RECENT INDUSTRIAL INVESTMENT:

- **SAKTHI**
  - New industrial unit.

- **GMD**
  - New industrial unit.

- **MECACHROME**
  - New industrial unit.

- **BORGWARNER**
  - Expansion of existing plant.

- **HOWA TRAMICO**
  - First industrial unit.

- **BOSCH**
  - Bosh car multimedia strengthens its R&D investment.

- **EBERSPÄCHER**
  - Opens exhaust technology plant.

Source: AICEP, 2020
Where are we today?

Capital
Capital fuels the ecosystem!

Capital is the key enabler that allows startups to research, experiment, develop and achieve the Holy Grail of product-market fit, upon which they can aspire to scale and eventually command a market segment and carry a unicorn label.

As an individual asset class, Venture Capital has the appeal of potentially providing “moonshot” payouts, but it is also a high risk business, as startup mortality rate is significant. It entails a lot more than just money, requiring a highly customized approach to a startup’s lifecycle, most often also requiring experience, insight, coaching and industry network.

Given its somewhat not very public nature, as well as capital’s global movements (especially in the European Union, with its free market), precise and detailed data are always a challenge to come by.
Capital has the potential to generate a virtuous spiral.

It is difficult to gather “flammable material” together to form ecosystems, but once the ignition point is reached and stars align, capital is the fuel that can propel a startup through its life cycle at lightning speed. Worth mentioning is the singularity where successful founders, after cashing in, become Business Angels and VCs, and give back to the ecosystems, funding and coaching young startups.
Capital invested world wide, split by region

Venture Capital is mostly invested in 3 regions:
- NORTH AMERICA represents ~50% of the allocation
- ASIA typically weighs 30%
- EUROPE'S share has been rising from 11% to 15% of the total

Total capital has risen 11% in 2020, in spite of Covid-19 effects

Sources: Dealroom.co
data excludes: biotech, secondary transactions, debt, lending capital, and grants, and Israel.
Capital invested in Europe

$41B
the projection for the total Venture Capital invested in Europe in 2020 is $41B, pretty much in line with the previous year of 2019.

Evolution is significant, showing:
- Accelerating growth rates of 38% (2016-2017), and over 78% (2017-2019)
- Flat evolution in 2020, showing resilience, even considering the effect of Covid-19

Sources: Dealroom.co
data excludes: biotech, secondary transactions, debt, lending capital, and grants, and Israel.
Invested capital allocation in Europe, by industry

An analysis of the preferred industries for investment in Europe highlights the following data points:

- Fintech takes the lead, followed by Enterprise Software and Healthcare.
- The market is pretty much skewed towards B2B, not surprisingly.
- Europe’s multi-country, multi-culture, multi-language environment does not favor a more uniform consumer market (like the USA), and a legacy of fragmented local regulation presents plenty of opportunities for disintermediation.

**CAPITAL INVESTED ($B) BY INDUSTRY**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Capital Invested ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fintech</td>
<td>9,392</td>
</tr>
<tr>
<td>Enterprise Software</td>
<td>6,922</td>
</tr>
</tbody>
</table>

**CAPITAL INVESTED (IN OECD$) BY INDUSTRY**

- Health: 4,226
- Transportation: 2,964
- Energy: 2,806
- Marketing: 2,784
- Food: 2,175
- Security: 1,365
- Real Estate: 1,214
- Robotics: 1,180
- Telecom: 995
- Travel: 732
- Media: 725
- Sports: 713
- Fashion: 703
- Semiconductor: 675
- Home Living: 618
- Legal: 559
- Jobs: 447
- Gaming: 381
- Kids: 312
- Educ: 326
- Music: 274
- Hosting: 516
- Event Tech: 146
- Jobs Recruiting: 447
- Gaming: 381
- Kids: 312
- Educ: 326
- Music: 274
- Hosting: 516
- Event Tech: 146

Sources: Dealroom.co

Data excludes: biotech, secondary transactions, debt, lending capital, and grants, and Israel.
Capital allocation in SaaS and big tech in Europe

A FINER LOOK AT 2 FOCUS AREAS, SAAS AND BIG TECH SHOWS A HUGE BET ON TECHNOLOGY AND SOFTWARE:

Capital allocated to SaaS in 2019 represents a ~44% increase from 2018

Capital allocated to BigTech in 2019 represents a ~46% increase from 2018

Sources: Dealroom co
Data excludes: biotech, secondary transactions, debt, lending capital, and grants, and Israel.
Europe is mostly an *Early Stage investor*, with small funds, **under 25M€**

Rookie fund managers also tend to focus on *early stage*, and as they gain experience, tend to shift more into **Series A**, probably to **minimize risk**.
Capital invested in Portugal: Evolution 2016-2019

Capital invested in startups in Portugal, although an elusive number and difficult to calculate, is:
- Commonly accepted to be -166m€ in 2019
- Showing a x2.5 (!) growth since 2018
- Leaving the country at #17 in the European ranking with 0.43% of the overall total - 38.5b€
- Cumulatively, Portugal ranks #23rd in terms of countries in Europe with more capital invested

Capital Invested in Portugal per year

<table>
<thead>
<tr>
<th>Year</th>
<th>Capital Invested</th>
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<tbody>
<tr>
<td>2016</td>
<td>$53M</td>
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<tr>
<td>2017</td>
<td>$26M</td>
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<tr>
<td>2018</td>
<td>$66M</td>
</tr>
<tr>
<td>2019</td>
<td>$166M</td>
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Ranking 2019

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Country</th>
<th>Capital Invested</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>United Kingdom</td>
<td>13 210</td>
</tr>
<tr>
<td>2</td>
<td>Germany</td>
<td>6 877</td>
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<td>3</td>
<td>France</td>
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<td>Bulgaria</td>
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</tbody>
</table>

Sources: Dealroom.co
Data excludes: biotech, secondary transactions, debt, lending capital, and grants, and Israel.
A look into capital registered in Portugal in 2019

Capital knows no borders, and is difficult to track; however, information about funds registered locally with the local regulator (CMVM) is publicly available and it is worth referring to.

- In 2019, the overall amount of assets under management grew 6.6% to 5.1b€.
- Here's the current landscape of the industry:

<table>
<thead>
<tr>
<th>#52 FUND MANAGEMENT</th>
<th>36m average size of the funds</th>
<th>11 FUNDS OVER 100M€ representing 54% of the total amount under management</th>
<th>12.5% of the total amount under management is in Funds below 200M€</th>
</tr>
</thead>
<tbody>
<tr>
<td>companies, managing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>135 funds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#620 EQUITY SHARES</td>
<td>454m invested in Information</td>
<td>46m The reported total amount invested in 2019 in early stage</td>
<td>454m The reported total amount of exits in 2019 in early stage</td>
</tr>
<tr>
<td>below 500k€ mostly</td>
<td>Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>startups</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Not all local funds invest or divest in local startups. A local investment of 46m€ in early stage would mean that local funds represent -28% of the total amount of the inflow of capital into early stage in 2019.

Sources: CMVM Venture Capital 2019 activity report
A view from the side of the business angels on early stage

A view from the Portuguese Association of Business Angels (APBA) annual 2019 survey of its associates, which focuses primarily on the early stage, shows a ~x2.4 growth in the invested amount from 2018 to 2019, with Fintech, Healthcare and Industrial/Energy as the preferred industries.

INVESTMENT 2018/2019

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>5,5M€</td>
</tr>
<tr>
<td>2019</td>
<td>13,4M€</td>
</tr>
</tbody>
</table>

INVESTED PROJECTS BY INDUSTRY

- **Fintech**: 25%
- **Healthcare**: 14%
- **Industrial/Energy**: 11%
- **Ecommerce**: 7%

Sources: APBA report 2018/2019
The role of public capital in Portugal

PORTUGAL’S 2 MAIN INSTRUMENTS OF PUBLIC CAPITAL, PORTUGAL VENTURES AND 200M HAVE HAD A KEY ROLE IN THE LOCAL ECOSYSTEM.

- Portugal Ventures playing the very early stage and leveraging ignition since 2012;
- 200m, a co-investment fund which has leveraged \( \times 2.5+ \) its capital, attracting foreign investors and providing mezzanine or early growth capital to high potential startups.

Interesting to note that Digital/ICT represent the majority of the targets in both funds, though the rest of the sectors not always match.

2020 Report shows 17.7 M€ invested in +59 startups, and in 2021 12 investments had already been concluded with another 47 ongoing.
KPIs at a Glance
**KPIs at a Glance**

**166M** in 2019, grew 150% from 2018

**RANK:** #17 in Europe on invested capital

**17,7M** invested by public capital in +59 startups

**RANK:** #39/190 on ease of doing business

**RANK:** #1/190 on "trading across borders"

**2nd** most open country for "foreign direct investment"

**OECD, FDI restrictiveness index 2019**

**RANK:** 2nd most open country for "foreign direct investment"

**OECD, FDI restrictiveness index 2019**

**28%** of graduates in S&T areas

**INE, 2020 (Sciences, ICT, Engineering)**

**1,4%** of GDP in expenditure on R&D in 2019

**DGEEC**

**2 business schools ranking on the top 25 best full-time MBAs in Europe**

**The Financial Times**

**4 unicorns**

**2159 startups 2020**

**13%** above the average no. of startups per capita in Europe

**RANK:** #12 for Lisbon in the top 100 emerging ecosystems

**Startup Genome 2020**

**158 incubators**

**2576 rooms**

**Grew 31% (2016-2019)**

**RNI, 2019**

**RANK:** #26/63 IMD world talent ranking

**IMD 2020**

**28% global talent competitiveness**

**Insead, Adecco, Google, 2020**

**28**/132

**RANK:** #7/88 English proficiency index

**EF 2020**

**91%** of the startups’ founders have a university degree

**EU Startup Monitor, 2018**

**12**/EU28 in connectivity

**DESI 2020**

**Startups**

**Scaleups**

**Policy, Regulation & Incentives**

**Knowledge**

**Talent**

**Capital**

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**Enablers**
How do we compare to Spain, Israel and Singapore?
How do we compare to Spain, Israel and Singapore?

- **GLOBAL PEACE INDEX 2020**
  - Institute for Economics & Peace
  - #3

- **QUALITY OF LIFE**
  - InterNations Expat Insider 2019
  - #1

- **INFRASTRUCTURE**
  - WEF, The Global Competitiveness Index 2019
  - #1

- **FIXED ROADBAND SUBSCRIPTIONS (PER 100 PEOPLE)**
  - World Bank 2019
  - 39%

- **TRADING ACROSS BORDERS**
  - The World Bank
  - #1

- **OPENNESS TO FDI**
  - OECD, FDI Regulatory Restrictiveness Index, 2019
  - #1

**Enablers**

- Policy, Regulation & Incentives

**39%**

**33%**

**29%**

**26%**
How do we compare to Spain, Israel and Singapore?

**Knowledge**

- **GROSS DOMESTIC EXPENDITURE ON R&D AS A PERCENTAGE OF GDP**
  - Turkey: 4.9%
  - Spain: 1.8%
  - Israel: 1.4%
  - Singapore: 1.2%

- **GLOBAL TALENT COMPETITIVENESS INDEX**
  - Turkey: #3
  - Spain: #20
  - Israel: #28
  - Singapore: #32

- **WORLD TALENT RANKING 2020**
  - Turkey: #9
  - Spain: #26
  - Israel: #32
  - Singapore: #52

- **LANGUAGE SKILLS**
  - Turkey: 35%
  - Spain: 29%
  - Israel: 24%
  - Singapore: 8%

- **% OF GRADUATES FROM SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS IN TERTIARY EDUCATION**
  - Turkey: 3%
  - Spain: 4%
  - Israel: 8%
  - Singapore: 3%

- **TERTIARY STUDENT INFLOW, % OF FOREIGN STUDENTS ENROLLED**
  - Turkey: 4%
  - Spain: 8%
  - Israel: 3%
  - Singapore: 4%

(All data as of OECD 2018 and 2017, respectively)
How do we compare to Spain, Israel and Singapore?

TOP 100 EMERGING ECOSYSTEM RANKING

- #6 Spain
- #6 Israel
- #12 Turkey
- #17 Portugal

Startups

- #6 Spain
- #6 Israel
- #12 Turkey
- #17 Portugal

Scaleups

Nº OF STARTUPS PER 100 THOUSANDS INHABITANTS

- Spain: 74
- Israel: 65
- Turkey: 21
- Portugal: 9

Capital Invested in Startups as % of GDP

- Spain: 2.00%
- Israel: 1.39%
- Turkey: 0.10%
- Portugal: 0.07%

Startup Genome
Scope and Methodology

The purpose of this study is to provide a comprehensive and in-depth view of the Portuguese startup and entrepreneurial ecosystem. It provides a detailed view of where we are today, who are the major players, what are the key KPI, how Portugal compares with other nations. It is also the voice of entrepreneurs that chose Portugal as the best place to start-up.

In addition to the number of startups and information about policies, regulation, public incentives, capital, talent, corporations, and key enablers of the ecosystem, this report analyzes key emerging trends, challenges, opportunities, and what is next for the Portuguese ecosystem.

This report was developed based on existing IDC research, public data, a survey carried out among more than one hundred startups founders, and more than 30 in-depth interviews with key ecosystem’s stakeholders.

Research Director • Gabriel Coimbra, Group VP & Country Manager, IDC
Project Manager • Pedro Cerdeira, Senior Advisor, IDC Portugal
Consulting Manager • Vanda Soeiro, Consulting Manager, IDC Portugal
Design • Mariana Antunes, Designer, IDC Portugal

Due to the dynamics of the ecosystem, this report is constantly being updated.

Download the latest version here!
Thank You!