

INVEST IN ITALY: Right Time, Right Place

INVEST
IN ITALY

ITA
ITALIAN TRADE AGENCY


Ministero dello Sviluppo Economico





Italy

The Perfect Platform for Life Sciences Industry

- March, 2018 •



INVEST
IN ITALY





3rd largest economy in
the Eurozone

Italy is open to
Technology and 4.0
manufacturing

Italy has a
large & skilled
workforce

Italy has among the
lowest **labour costs** in
Western Europe

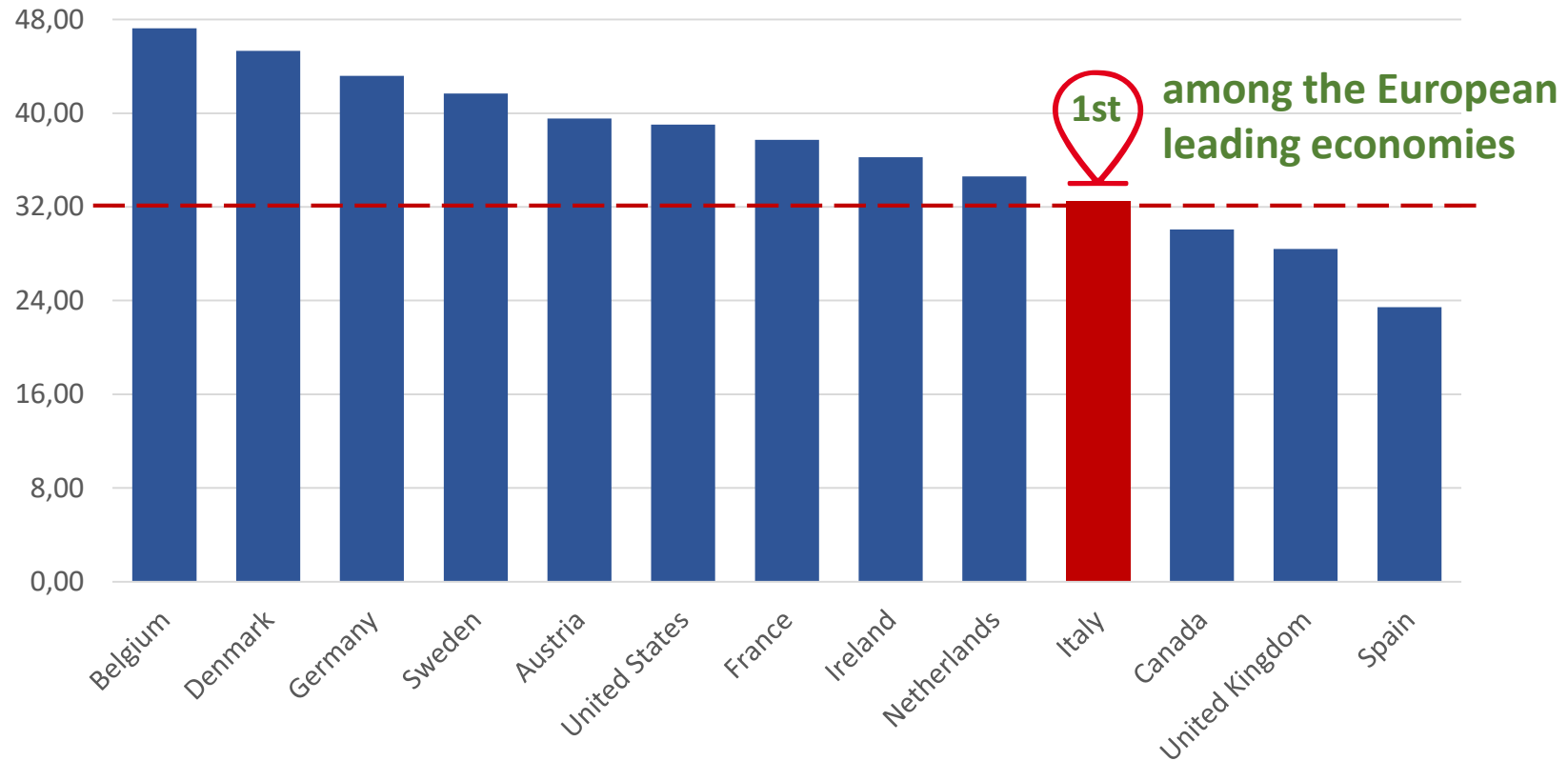


Competitive location
for investment.
Cheaper than USA and
many Western
European competitors





Labour cost (manufacturing hourly compensation costs; US Dollar)





Economic Outlook

GDP growth of 1.5% in 2017 is forecast for **1.4%** for 2018

Unemployment rate fell by 0,5% between 2016/2017

Export increased by 7.4% between 2016/2017

Investors' confidence index (2018) grows: +3 than 2017.

Italy ranks **10th** in 2018 for FDI attractiveness, +8 than in 2015

Italy is the **9th** economy in the world, based on strong export





Corporate Taxation Reform

In the last years the Italian Parliament approved new legislation, including tax incentives, specifically aimed at making Italy an attractive location for investment in manufacturing and R&D.

Among those specific tax incentives, the following are particularly relevant:

- **Patent box**
 - a 5 year-elective regime will grant a **partial tax exemption** on **income** derived from qualifying **intangible assets** (patents, know-how, trademarks) as long as the Italian company performs R&D activities
- **New R&D tax credit**
 - enhanced for 2015-2019, with the elimination of any access limitation based on turnover and a doubled cap amount (from 2.5M to 5M euro per year)
- **Tax credits/incentives** for the **purchase of machinery & industrial equipment**
- **Full deductibility** from the **IRAP** (regional tax) of labour cost for **employees** hired on a **permanent basis**





Corporate Taxation Reform

Other tax incentives are:

The “**Destination Italy**” Decree

- created a specific and dedicated **desk** of the **Revenue Agency** (*Agenzia delle Entrate*) in order to help and provide information **to foreign investors**
- enhanced the **tax ruling** procedures, by extending the validity period of the preventive rulings from 3 to 5 years and including also the existence of Italian permanent establishments of foreign companies





Life sciences Industry





Lifesciences: Pharmaceuticals, Medtech and Biotechnologies



The move from treatment to prevention, diagnostics and cure...

Pharmaceuticals: The pharmaceutical industry discovers, develops, produces, and markets drugs or pharmaceutical drugs for use as medications: drug discovery, drug development

Medtech: Worldwide medtech sales are forecast to grow at an annual compound growth rate of 5.1 percent, reaching US\$521.9 billion by 2022. The largest medtech segment with annual sales of US\$70 billion by 2022 is expected to remain in-vitro diagnostics . Cardiology ranks second, expected to reach US\$62 billion in sales by 2022, followed by diagnostic imaging at US\$48 billion, and orthopedics.

Biotechnologies: Any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use. White biotechnology is the application of biotechnology for industrial purposes. It includes the practice of using cells such as micro-organisms, or components of cells like enzymes, to generate industrially useful products.





The Ranking of competitiveness of the Trade Performance Index (sectors/worldwide)

Sectors	ITALY	GERMANY	CHINA	REP. OF KOREA	JAPAN	FRANCE	UNITED STATES	UNITED KINGDOM
Electronic components	2	1	50	14	4	32	54	61
Miscellaneous manufacturing	2	1	4	25	7	49	61	46
IT & Consumer electronics	44	31	6	9	50	45	48	49
Transport equipment	2	1	26	6	14	13	48	33
Textiles	2	3	1	8	22	45	56	57
Leather products	1	60	2	87	126	35	108	82
Clothing	1	68	2	86	113	69	114	82

Italy is already leader, Medtech included





Strong Points

UNIVERSITIES
FACULTIES AND
DEPARTMENTS

ENGINEERING – CHEMISTRY - PHARMACY – MEDICAL UNIVERSITIES



ASS. NAZ. TECN. APPARECCHIA. BIOMEDICHE

<http://www.antab.org/wp/#>



ASS. NAZ. BIOTECNOLOGI ITALIANI

<http://www.biotecnologi.org/>



ASSOCIAZIONE DISTRIBUTORI FARMACEUTICI

<http://www.adfsalute.it/ASSOCIAZIONE>



FARMACEUTICA INDUSTRIA

<http://www.afiscientifica.it/>

Associazione Farmaceutici Industria
Società Scientifica



CONSORZIO
INTERUNIVERSITARIO
BIOTECNOLOGIE





- **Scientific and technological Parks (25)**

- **Tech Districts (18)**

PST della Sardegna - Porto Conte	Distretto H-BIO Puglia
POINT POlo INnovazione Tecnologica provincia di Bergamo	Medis – Distretto meccatronico
Polaris - PST della Sardegna - Pula	Di.T.N.E. - Distretto Tecnologico Nazionale sull'Energia
Parco Scientifico e Tecnologico della Sicilia - Catania	ComoNext
Consorzio PST Multisetoriale Magna Graecia	Distretto Agro-alimentare Regionale D.A.Re. Scarl
Pa.L.Mer	DHITECH Scarl - Distretto Tecnologico High Tech
Parco Scientifico biotecnologico San Raffaele	Tecnopolo di Mirandola
Parco Tecnologico Padano	Imast S.c.a.r.l.
Parco Scientifico e Tecnologico Galileo	Atcoroglio
Parco Scientifico e Tecnologico della Sicilia - Palermo	Polo Tecnologico di Pavia
CERFITT	Polo tecnologico di Navacchio
Tecnopolo Tiburtino	Sardegna DistrICT - DT Biomedicina-Tecnologie Salute
Tecnopolo di Castel Romano	Sardegna DistrICT - DT Tecnologie e Comunicazioni
Fondazione Toscana Life Sciences	DTA - Distretto Tecnologico Aerospaziale
Parco Scientifico e Tecnologico Kilometro Rosso	Habitech Distretto Tecnologico Trentino
Sviluppumbria	Fondazione Torino Wireless
3A Parco Tecnologico Agroalimentare dell'Umbria	Centro di Biomedicina Molecolare (CBM)
AREA Science Park	BioTecnoMed
Polo ICT	● Other Centres
Environment Park	Aster
Bioindustry Park Silvano Fumero S.p.A.	C.R.M.P.A. Centro Ricerca Matematica Pura Applicata
Friuli Innovazione - Centro ricerca e trasferimento tecnologico	CUSSMAC
VEGA VEnice GATeway for Science and Technology	Tis Innovation Park
DT Sicilia Micro e Nano sistemi	Tecnogrande





Ministry of Education, University and Research



MINISTERO DELL' ISTRUZIONE, DELL'UNIVERSITÀ E DELLA RICERCA

• AEROSPACE TECHNOLOGY	ROME	http://www.ctna.it/
• AGRIFOOD	ROME	http://www.clusteragrifood.it/en/
• GREEN CHEMISTRY	MILAN	http://www.clusterspring.it/home/
• INTELLIGENT FACTORIES	BOLOGNA	http://www.fabbricaintelligente.it/en/
• CLUSTER TRASPORTI	ROME	http://www.clustertrasporti.it/
• LIFE SCIENCE	MILAN	http://www.clusteralisei.it/en/
• SMART LIVING TECHNOLOGIES	ANCONA	http://www.smartlivingtech.it/en
• SMART COMMUNITIES TECH	TURIN	http://www.smartcommunitiestech.it/en/

What's coming next...

- HERITAGE TECH
- DESIGN
- MADE IN ITALY
- SEA ECONOMICS
- ENERGY



ALISEI

Advanced Life Sciences in Italy



Source: <http://www.miur.gov.it/cluster>



Foundation financed by the State to conduct scientific research for the purpose of technological development. IIT aims to promote excellence in basic and applied research and to promote the development of the national economy.

IIT's production includes **8569 publications**, over **150 European projects** and **17 ERC** (European Research Council) **projects**, more than **500 active patent applications**, **17 established start-ups** and 26 under due diligence.

Since 2009, the Institute's scientific activity has been further strengthened with **the creation of eleven IIT research centres in Italy** (in Turin, two in Milan, Trento, Rome, two in Pisa, Naples, Lecce, Ferrara) and **two outstations located abroad** (MIT and Harvard in the US)

11 scientific programs of three types:

Technology Programs, primarily imed at developing High tech research in collaboration with external entities and industries:
Portable Energy, Robotic Rehabilitation, Graphene

Core Programs, dedicated to the basic research activities traditionally developed by IIT :
Brain Science, Robotics, New Materials, Materials Chemistry

Cross Disciplinary Programs, primarily devoted to high risk-high return research both basic or applied:
Interaction, Health Technologies, Nano-Bio Photonics, Computation

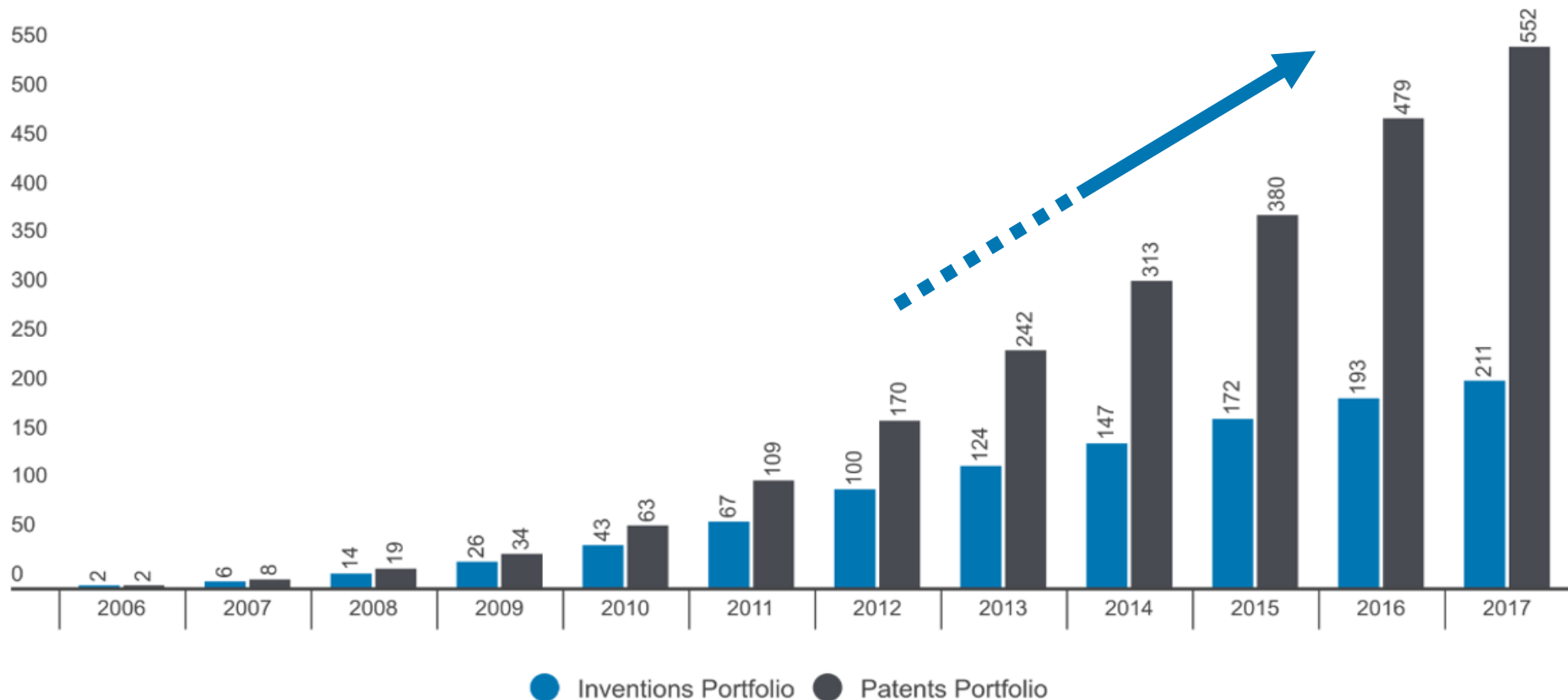


Source: <https://multimedia.iit.it/asset-bank/assetfile/9590.pdf>



TECHNOLOGY TRANSFER (Inventions and Patents)

**Strong
Points**



Source: <https://multimedia.iit.it/asset-bank/assetfile/9590.pdf>



Abundant and Skilled Workforce

Italy has some of the world's best engineering universities. Indeed, engineering is the 2nd highest course for enrolment in the country – **225,619** currently studying an engineering discipline.¹

The engineering sector currently employs around 417,000 people in Italy.³

Mainstay

The Technological Departments of the Italian Universities annually produce a pool of graduates with the knowledge and industry experience to immediately enter the work force.



POLITECNICO MILANO



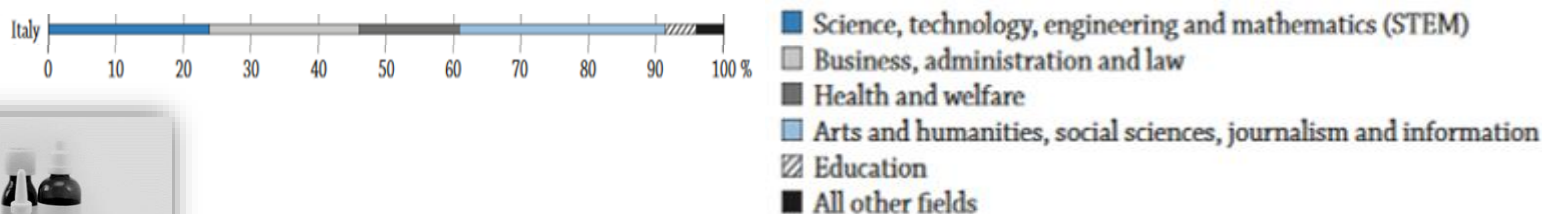
Politecnico di Bari



POLITECNICO DI TORINO

And much more.

Tertiary-educated 25-64 years old (2016) – Fields of study



Source: ¹Ministry of Education ²AlmaLaurea ³La Repubblica; OECD ILibrary (<http://www.oecd-ilibrary.org/education/education-at-a-glance-2017>)





Companies Associations:



ASSOBIO MEDICA

ASSOBIO MEDICA

<https://www.assobiomedica.it/it/index.html>



FARMINDUSTRIA

FARMINDUSTRIA

<https://www.farmindustria.it/>



FEDERCHIMICA ASSOBIOTEC
ASCHIMFARMA

FEDERCHIMICA

<https://assobiotec.federchimica.it/en/home>
<https://aschimfarma.federchimica.it/>



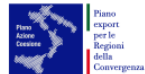


ITALIAN INNOVATION DAYS, ASIA AND...

NORTH AMERICA



BIAT Sections
Aerospace
Environment
Biotechnologies
Greentech
ICT
Nanotechnologies
New materials
Mechatronics
Smart Communities technologies

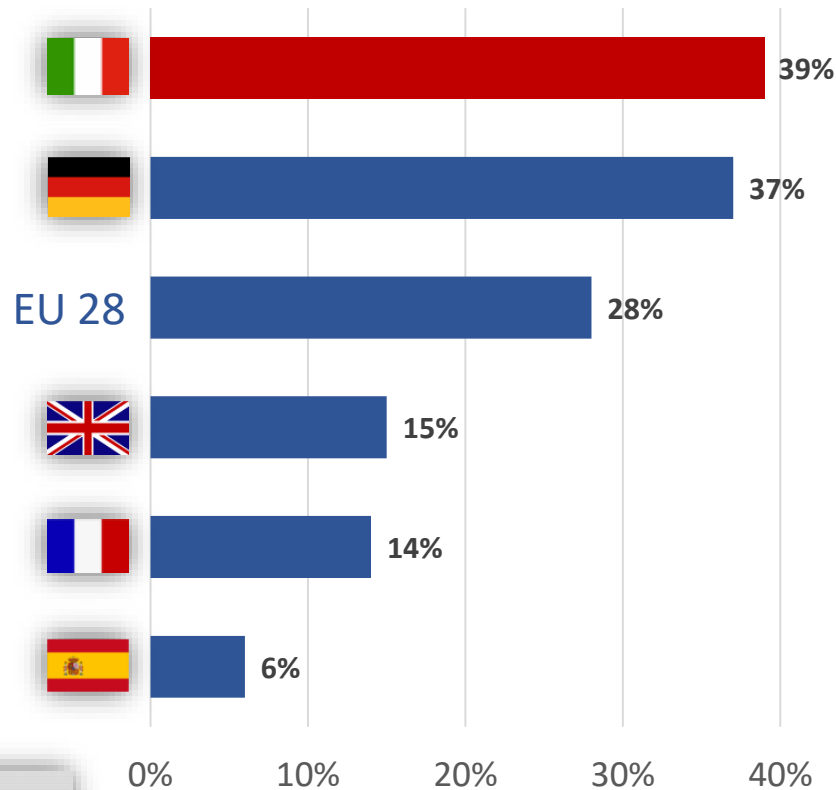




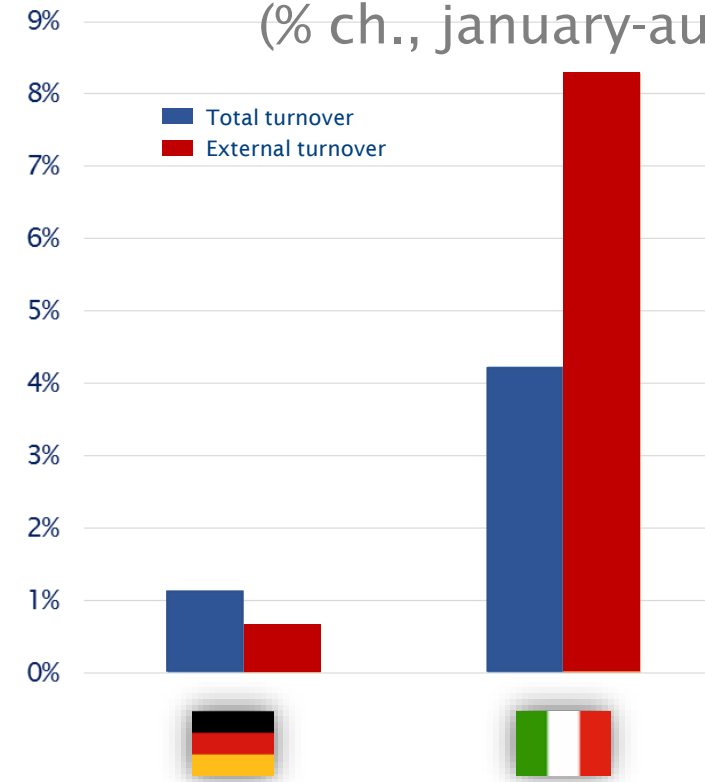
Italy ranks already first in some sectors, like f.e. the CDMOs

Strenghts

Growth of export 2011-2016



2017/2016: Comparison Italy-Germany
(% ch., january-august)



Source: Eurostat





Strenghts

Companies' Nationality

Ranking of Italy



1st



1st



2nd after Germany



2nd after Germany



World hub for vaccines

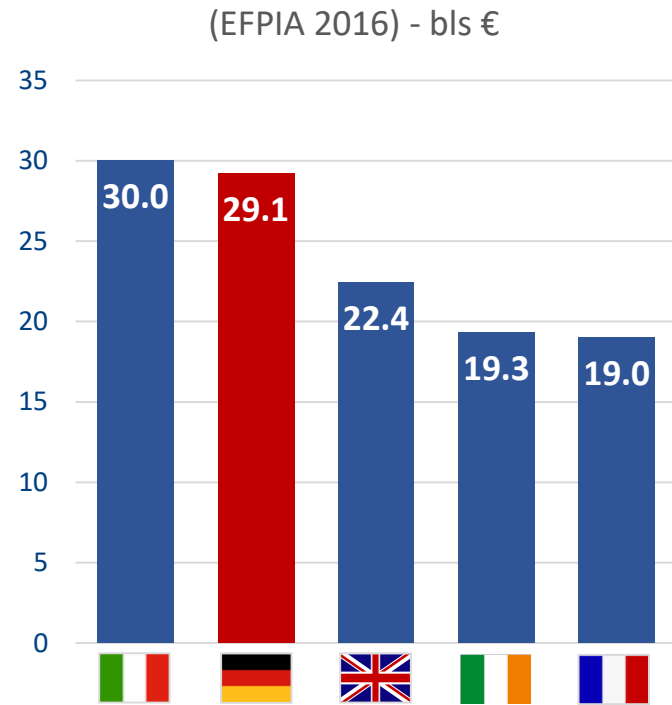


Source: Eurostat, Fondazione Edison data



Pharmaceutical Production

Strenghts



220 companies manufacturing medicines and vaccines; 100 produce active ingredients

64,400 people employed directly (+2,400 from 2013); 65,000 in upstream sectors

€ 30 billion in manufacturing value of which 71% in exports (€20.5 billion)

€ 2.7 billion invested each year in R&D (1.5) and hi-tech equipment (1.2)

Worldwide excellence in upstream sectors especially in equipment and packaging



Source: Elaboration of Istat; Efpia "Key Data, 2018"; Eurostat Data



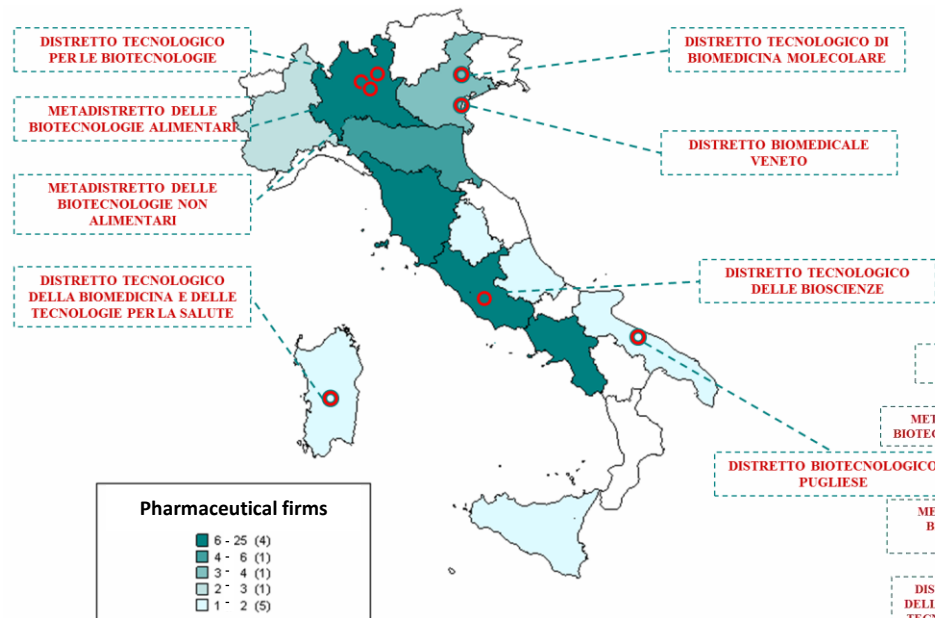
Strengths

	1st	2nd	3rd	4th	5th
Medicine (all disciplines)					
Oncology					
Cardiology and cardiovascular					
Neurology					
Pharmacology					
Drug discovery					

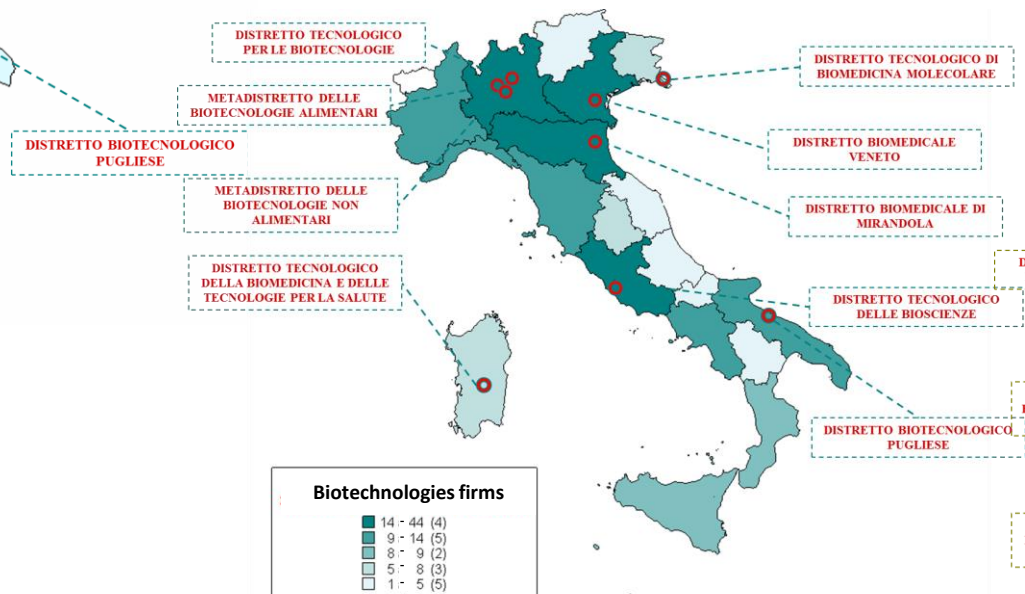
International scientific competitiveness in many therapeutic areas – for example oncology, cardiology, hematology, rare diseases, immunology, neurology, metabolic disorders – thanks to many excellences in NHS, “IRCCS”, Universities, Charities, public-private partnerships

Source: SciMago

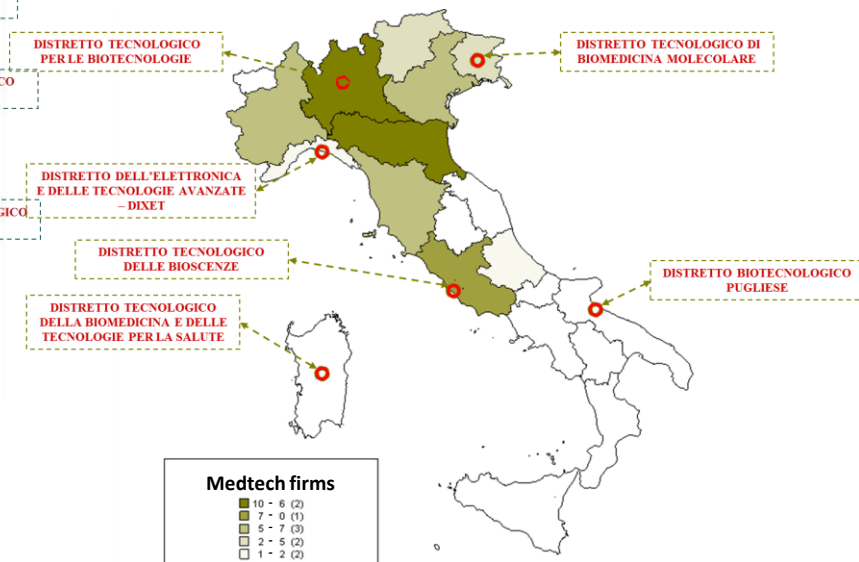




Biotechnologies



Medtech



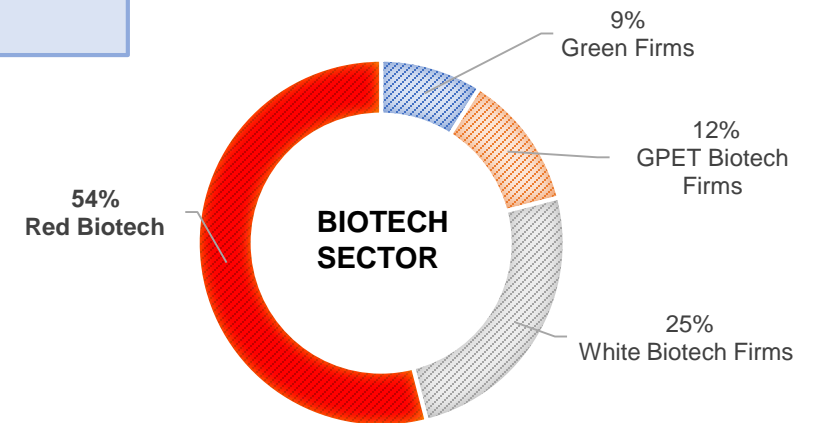


Biotech sector composition

RED BIOTECH

Italy is a pioneer and a global leader

- ✓ **289** Firms in the field of human health
- ✓ **74%** of the total Italian Biotech turnover
- ✓ **21%** of employees involved in R&D activities
- ✓ **89%** of the total Biotech R&D investment (1.4bn)



1st Country by number of Advanced Therapy products authorized by the EU (3 out of 5)

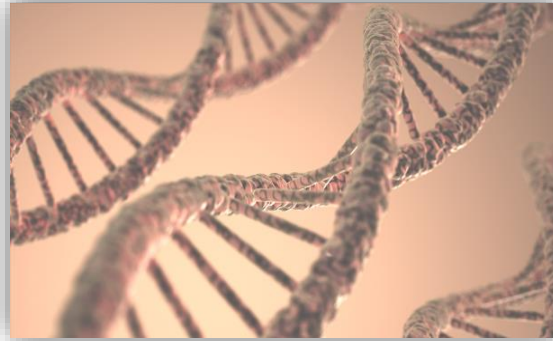




Genome editing

Italian researchers and companies are at forefront of the DNA engineering issue

'EvoCas9' is an evolution of CRISPR on genetic manipulation, an Italian 'Molecular scissors', the world best technique at this moment developed from CIBIO (University of Trento)



What is CRISPR

In nature, 'cas' proteins update bacterial genome enabling evolution. CRISPR is the technique used by researchers for this purpose to manipulate DNA



Med tech: 3D printing

Several Italian companies deal with common medical devices. And latest biological 3D printing technologies are within reach

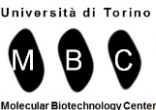


Most recent successes

Parkinson Disease
Protein 'Synapsin 3'



Breast Cancer
Protein 'p140Cap'





Around 65%
export volumes
made from
4 large Pharma
clusters



Cluster Lombardo
Scienze della Vita

<http://www.lombardialifesciences.it/en/>



dtb
distretto tecnologico
delle bioscienze

<http://www.lazioinova.it/il-distretto-tecnologico-delle-bioscienze/>



TLS
TOSCANA LIFE SCIENCES

<http://www.toscanalifesciences.org/en/>



bioscience
CAMPANIA



distretto
biomedicale
mirandolese

<http://www.distrettobiomedicale.it/>



INNOVATION TANK
CAPITANK
Chemicals And Pharmaceuticals

<http://www.capitank.it/capitank/statuto/>



BIO
TECNO
MED
CALABRIA LIFE SCIENCES

<http://www.biotechnomed.it/>

Italian Life sciences are much more...



INVEST
IN ITALY

Source: "La Bioeconomia in Europa", Banca Intesa; "Rapporto sulle biotecnologie del settore farmaceutico in Italia, 2016", Farmindustria-Ernst&Young



Life Sciences

Next trade shows and events:





Italian Trade Agency
Via Liszt, 21
00144 Roma
fdi@ice.it
www.ice.it

**Thank you for
your attention**