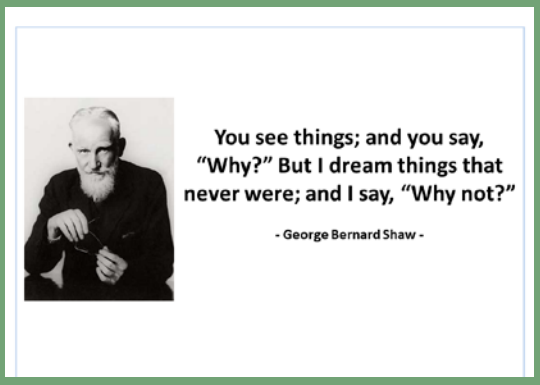
FRANCO-ITALIAN BUSINESS FORUM 2014
HOW TO REVIVE THE INDUSTRY AND ENHANCE COMPETITIVENESS



Topic 2: Develop new sources of revenues

Paris
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NON PRICE COMPETITIVENESS | BASIC DATA

Business environment: limited attractiveness, but some encouraging factors

According to the World Bank "Ease of Doing Business Index", France and Italy have a **relatively low ranking** (respectively, 38th and 65th).

This is the same concerning diagnosis in terms of global competitiveness according to the 2013-2014 World Economic Forum Index (respectively 23rd and 49th out of 148). Besides, both countries are loosing ground (their 2012-2013 WEF ranking was, respectively, 21st and 42nd) and need to act on most of all the competitiveness pillars as deinfed by the WEF, in particular on:

- Macro environment in both countries (knowing that the link between GDP growth and competitiveness is a two-way relationship: the weakness of competitiveness may be due to the low growth environment but tepid growth is also the result of the weakness of competitiveness). France and Italy both need to boost their growth to restore their competitiveness and boost their competitiveness to restore their growth
- Goods and labour market efficiency in both France and Italy
- Institutional environment and financial market in Italy

The 12 pillars of competitiveness as defined by the World Economic Forum

Competitiveness is broadly defined as the set of institutions, policies, and factors that determine the level of productivity of a country.

- ***First pillar : institutional environment***, determined by the legal and administrative framework within which individuals, firms, and governments interact to generate wealth. What counts is a sound and fair institutional environment. The role of institutions goes beyond the legal framework: government attitudes toward markets and freedoms and the efficiency of its operations are also important (excessive bureaucracy and red tape, overregulation, corruption… are among the economic costs that slow the process of economic development). The proper management of public finances is critical too. Private institutions are also an important component of the quality of the institutional environment
- ***Second pillar: Infrastructure***
- ***Third pillar: macroeconomic environment*** (the stability of it being what counts for competitiveness)

France global competitiveness ranking

23rd / 148

Italy global competitiveness ranking

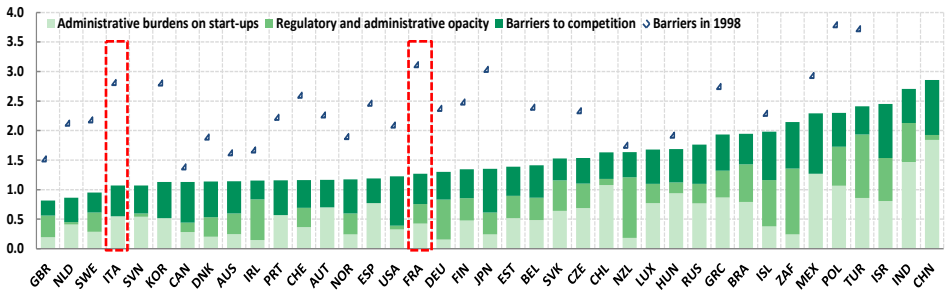
49th / 148

- ***Fourth pillar: health and primary education***
- ***Fifth pillar: higher education and training***
- ***Sixth pillar: goods market efficiency*** (healthy market competition and buyer sophistication are the main criteria)
- ***Seventh pillar: labour market efficiency*** and flexibility without much social disruption
- ***Eighth pillar: financial market development***. What counts is a sound and well-functioning financial sector, with no distortion in the allocation of resources. The degree of sophistication is also important, that is how much diversified are the sources of capital financing. Appropriate regulation and transparency are part of the equation.
- ***Ninth pillar: technological readiness*** measures the agility with which an economy adopts existing technologies to enhance the productivity of its industries, with specific emphasis on its capacity to fully leverage information and communication technologies (ICTs) in daily activities and production processes for increased efficiency and enabling innovation for competitiveness
- ***Tenth pillar: market size***
- ***Eleventh pillar: business sophistication*** (concerns the quality of a country's overall business networks and the quality of individual firms' operations and strategies)
- ***Twelfth pillar: innovation***

However, there are some **encouraging factors** in both French and Italian business environements:

- Barriers to entrepreneurship are relatively low and diminishing. Italy is among the least retrictive economies for entrepreneurs, whereas France is fairly well positionned, between Germany and the US.

Barriers to entrepreneurship, 2008
(source OECD STI 2013)



- France's long-standing attractiveness is better than suggested by competitiveness indicators. This attractiveness is said to be the result of the high quality of transport and communication infrastructures, the large size of the French market, the well-trained and skilled workers, the diversified industrial network, the R&D and innovation environment.

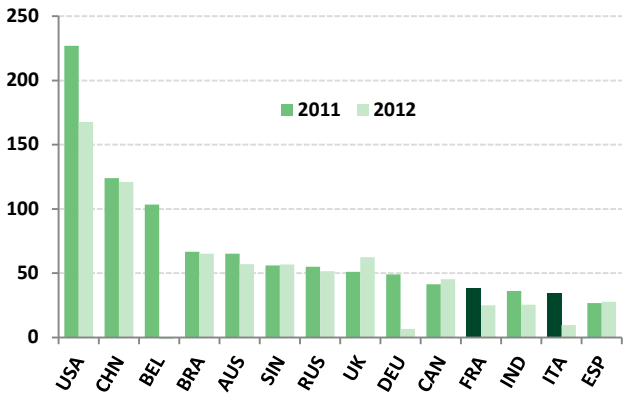
The top ten investing countries in France, 2013
(number of projects*, source AFII-Invest in France Agency)

	2011	2012	2013	2013 share
USA	149	156	122	18
DEU	120	113	106	15
ITA	46	63	64	9
GBR	36	39	42	6
BEL	39	28	37	5
JPN	38	34	35	5
ESP	27	33	34	5
CHN	23	31	33	5
CHE	46	39	29	4
NLD	20	24	28	4
others	148	133	152	22
Total	**698**	**693**	**685**	**100**

** Projects leading to the creation of at least 10 jobs are taken into account. In the case of a first establishment of non-EU investors as well as in the case of high value added projects (R&D, design, engineering, headquarters, business services), projects are counted from the first job.*

- FDI inflows remain relatively healthy both in Italy and France

FDI inflows: main receiving countries
(USD bn, source UNCTAD)



Total investment in France:

19%

of GDP (2013)

Investment in Italy:

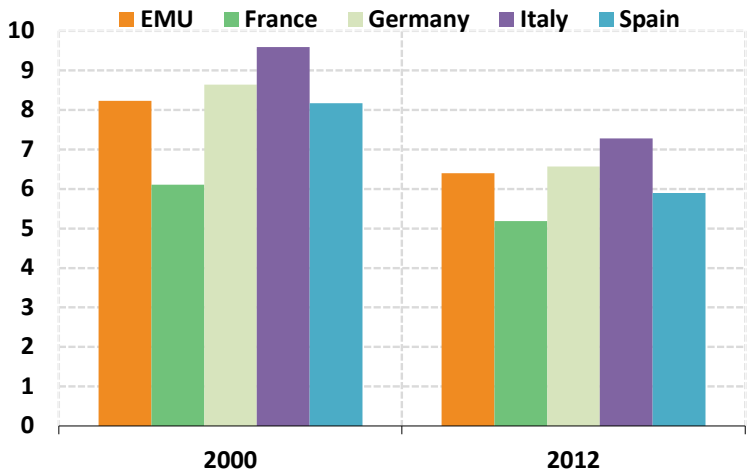
17%

of GDP (2013)

Investment: to be revived and upgraded

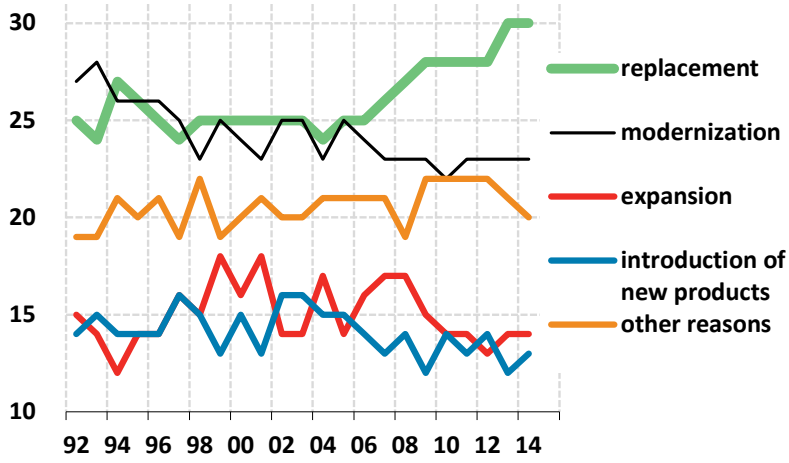
Investment as part of GDP has not increased compared to its early 2000's level. This lack of investment is largely cyclical and the outlook seems brighter thanks to improving economic prospects and financing conditions. And the potential of increase appears to be significant after years of under-investment.

Non-residential Investment rates
(% of GDP, source Eurostat)

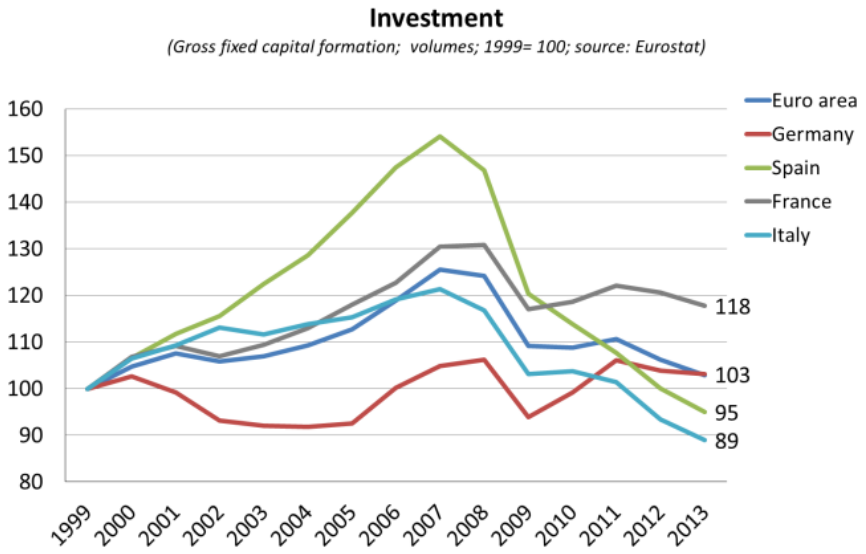


However, in France, this is not solely a question of increasing the quantity of non-residential investment. The capital stock is quite old and this weighs on productivity and profitability. Therefore, the quality of investment also needs to be enhanced. Nowadays, firms investment is more and more motivated by replacement needs rather than by the modernization of equipments, embedding the newest technologies which are more productive and more growth-supportive. Similarly, France needs to boost automation investment.

Investment by main purpose in France
% of answers (INSEE quarterly survey on industry investment)



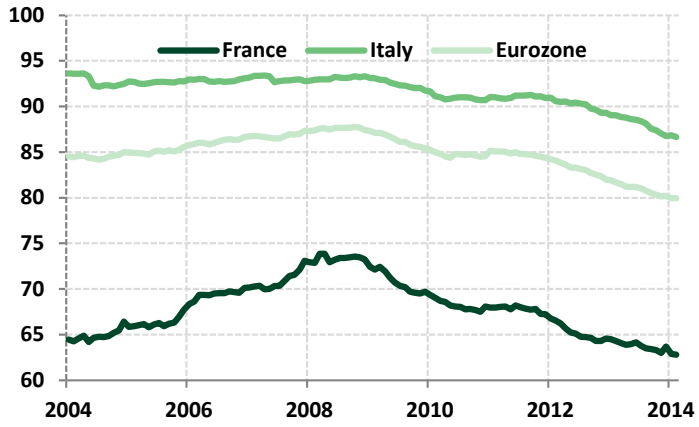
In Italy the two recessions of 2008-09 and 2011-13 have caused investment to fall well below the volumes recorded at the start of the euro.



Financing: how to support growth while diverisfying sources of funding for firms?

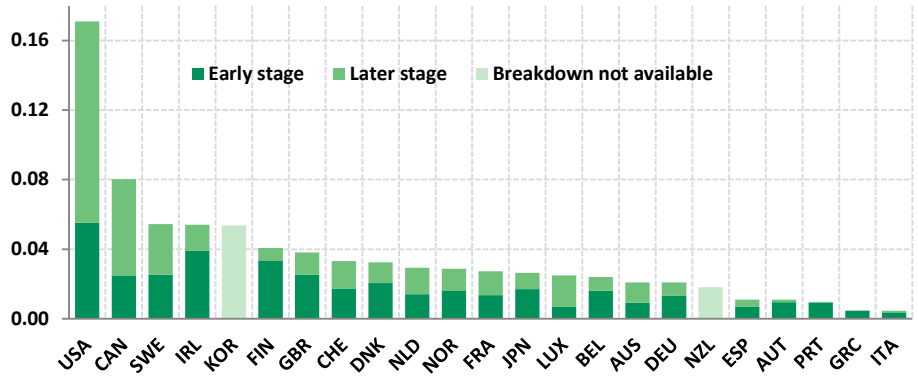
There is a much higher degree of banking intermediation in Italy than in France and the Eurozone as an average.

Banking intermediation rate - Share of bank loans outstanding in the total of NFCs' debt (bank loans + debt securities), %



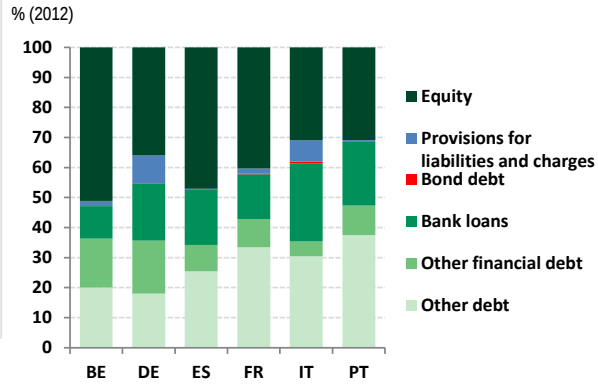
The lack of alternative sources of financing, especially for the smallest firms and the riskier projects limits the exposure to specialized know-how and skills that could accelerate growth. For instance, venture capital investment is poorly developed, especially in Italy.

Venture capital investment, as a % of GDP (2012)
(source OECD STI 2013 Scoreboard)



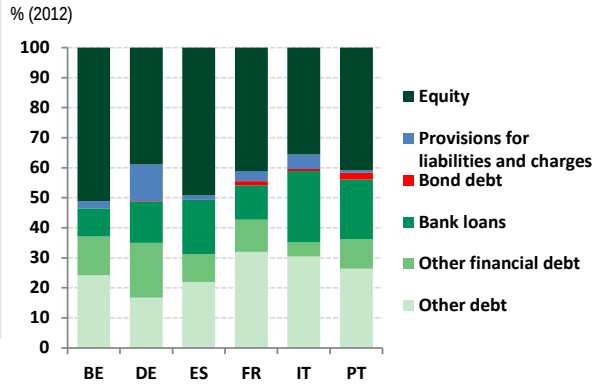
In the manufacturing sector, French SMEs are more capitalized than their Italian counterparts. By contrast, Italian SMEs rely more on bank lending because of limited access to other sources of financing.

Structure of Small-Sized Companies* liabilities



*Turnover < 10 € million

Structure of Medium-Sized Companies* liabilities



*10 € million < Turnover < 50 € million

Equity is less common in Italy. The leverage of Italian firms was 48% in 2012, 6 percentage points higher than that in Germany and 14 percentage points higher that the French value. The total market value of Italy's non-financial corporations is 20% of GDP compared with 64% in France and 45% in Germany. Bond financing has been also fairly limited with just an average of ten a year of Italian corporations making bond issues on the capital market over the last decade. Expanding the sources of funding requires a major commitment by businesses to increase their transparency. Potential benefits are considerable for banks as well.

INNOVATION|BASIC DATA

Global R&D investments mostly concentrated in the US, China and Japan

According to experts, in 2014 only fourteen countries will contribute the 83% of the overall $1.6 trillion global spending on R&D. The combined investments of the US, China and Japan will account for more than 50% of the total.

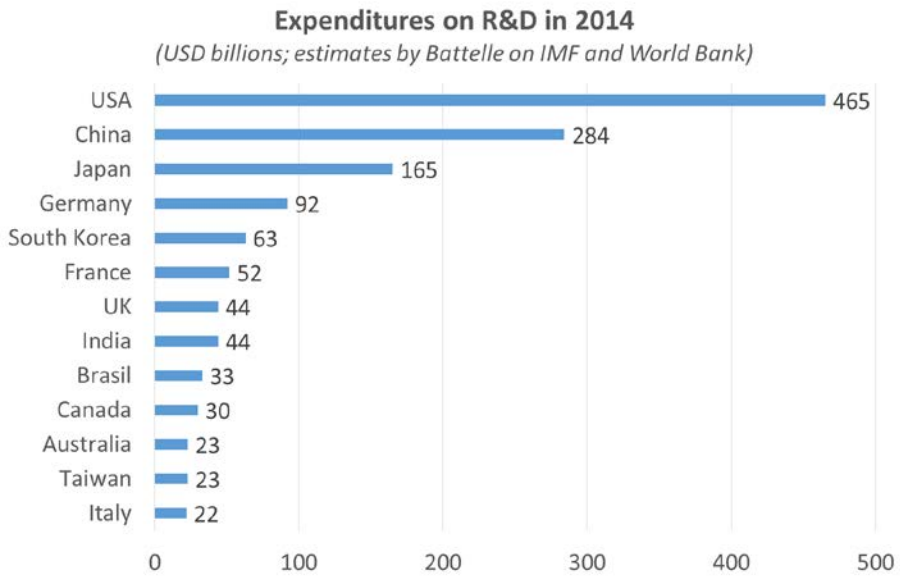
The US do retain the primacy with projected $465bn spent on R&D but China is swiftly approaching with $284bn. Coeteris paribus, China's total funding of R&D is expected to surpass that of the US by about 2022.

In 2014 the three major Eurozone countries – namely, Germany, France and Italy – will account for 10% of the world spending on R&D: a share that goes below the weight (12%) of the three economies on the world GDP.

Summed together, the 2014 R&D spending by France and Italy could amount to some $74bn ($52bn for France and $22bn for Italy).

French absolute spending on R&D is 2.4 times higher than the Italian spending, while the French GDP is only 33% higher than the Italian GDP ($2,886bn vs $2,171bn in 2014, according to IMF, World Economic Outlook April 2014 estimates).

Focusing on R&D is a major challenge for both countries as they strive for higher and sustainable development.



In 2014 the United States' R&D spending is estimated at

$465bn

China R&D will surpass US by

2022

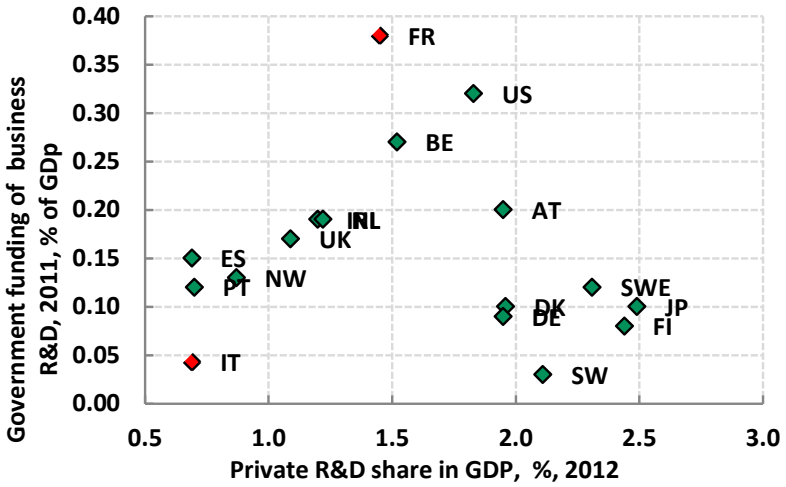
In 2014 France and Italy R&D spending is projected at

$74bn

France: the R&D spending as a share of GDP is close to the EU average

R&D spending in France represented 2.3% of GDP in 2012, a similar figure than in 1995. This stability is striking because, over the same period, the R&D effort has been on an upward trend in Germany and the US for instance and also in Italy.

Despite the 2009 great recession, this is good news for R&D not to have declined. This resilience may be due to the large amount of government funding of business R&D (0.4% of GDP in 2011, that is a slightly higher share than in the US where it stands at 0.3%, and a much higher share than other European countries). However, given precisely this significant public support, a higher R&D share would be awaited.



Though insufficient, the R&D effort in France is not that low: indeed, it is a touch higher than the EU average. As for its breakdown between public and private R&D, it shows that the latter represents 64% of the total, a proportion that is not very far from the German two-thirds and higher than the 55% share in Italy. However, it is said that a higher degree of cooperation between the public and the private sector would contribute to improve the impact and externalities of the global R&D effort.

In France total R&D spending is

2.3%
of the GDP

In Italy total R&D spending is

1.27%
of the GDP

In Italy overall R&D personnel amounts to (FTE)

230k

In Italy high-tech manufacturing firms are

6.3k

In Italy high-tech exports stops at

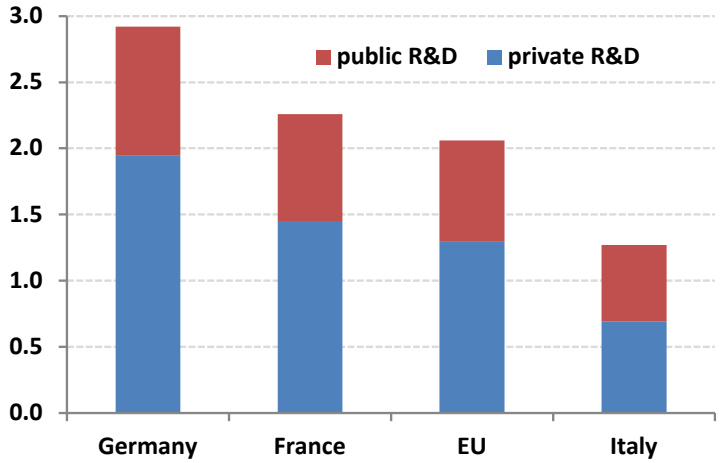
6.4%
of the total

In Italy patent applications are

64

per million/inhab.

R&D spending, as a % of GDP (2012)
(source Eurostat)



In terms of patents, Germany is by far the main provider in the EU (40% of the total) but France is also doing relatively well (15% of the total), especially regarding high-tech patents, ranking 2nd for total application and 6th when adjusted for the size of its population (Italy is 14th).

France is nonetheless clearly lagging in terms of robots and this gap is concerning because robots are a source of productivity and competitiveness. According to the statistics of the International Federation of Robotics, it bought only an average of 3,000 robots in 2011-2012, compared to 4,700 in Italy (also a very low figure), 18,500 in Germany, 21,000 in the US and 28,000 in Japan.

Italy: lower R&D spending, fewer researchers

Innovative activity is less intense in Italy than in the leading economies, above all in the private sector. In 2012, in Italy R&D spending amounted to €19.8 billion.

As a percentage of GDP, in 2012, in Italy, R&D spending was 1.27%, against a European average of 2.06%. The total R&D spending to GDP ratio was 2.92% in Germany. In Italy, R&D expenditure remains below the objective of 1.53% set by the European Commission in its Europe 2020 growth strategy, which foresees a common target of 3%.

In 2011, in Italy, the total number of R&D personnel, measured in full time equivalent, was about 230 thousands. As a percentage of persons employed, it was 1.51%, against 1.83% in the European average and 2.1% both in Germany and France.

The high-technology manufacturing sector in Italy is smaller, mainly as a consequence of the small size of enterprises. In 2011, firms in the high-tech manufacturing sector were about 6.3 thousands, with almost €50 billion of

In Italy R&D spending by firms is just the

55%

of the total

In Italy firms with >250 employees account for

80%

of business R&D

Firms investing in R&D are in Italy only the

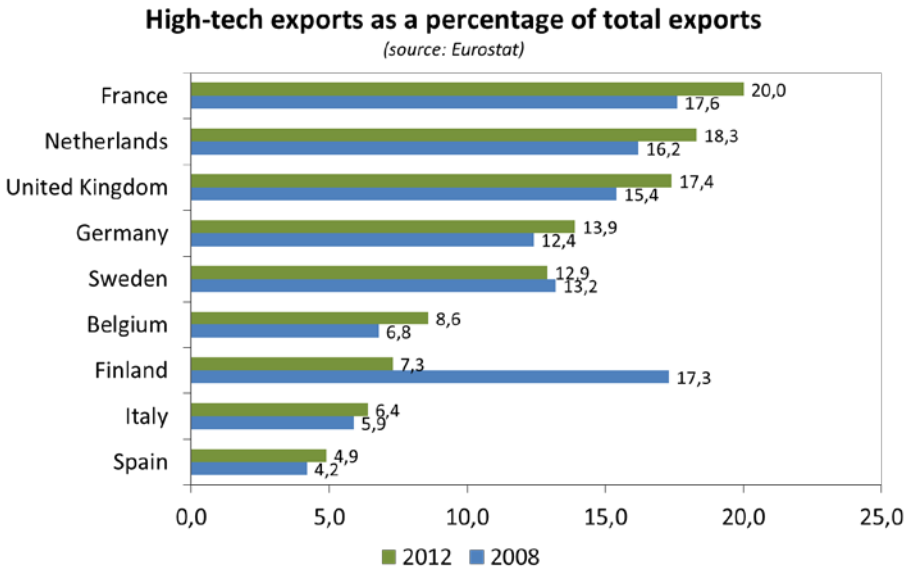
18.7%

of the total

turnover and €15 billion of value added. In Germany, 8.5 thousands companies generated €117 billion of turnover and €41 billion of value added.

In 2012, in Italy, high-tech exports as a percentage of total was 6.4%, well below the German and French values (respectively 13.9% and 20%). Besides, Italy recorded a high-tech trade balance deficit of €14 billion, against a €16 billion surplus in Germany.

The gap between Italy and other European countries is even wider in the propensity to patent. In 2011, patent applications to the European Patent Office were 64 per million inhabitants in Italy, in comparison with 107 in the EU average and well below both France (133) and Germany (272) values.



HOW INNOVATIVE ARE FRENCH AND ITALIAN FIRMS

France: a mixed bag

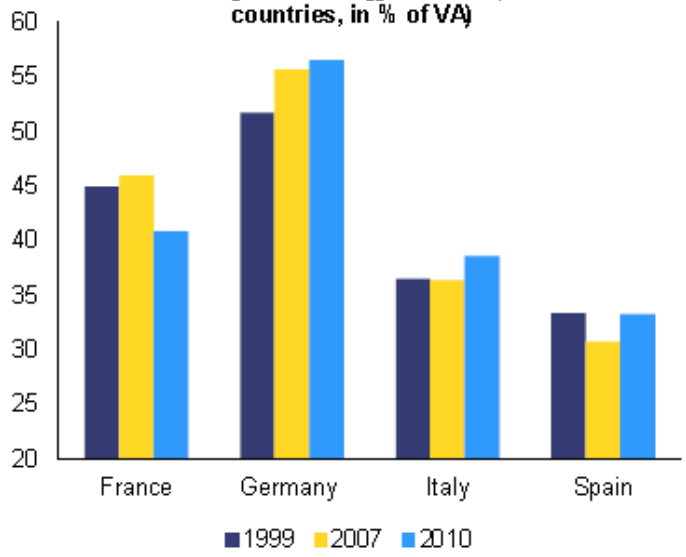
The results of the available surveys and data are mixed. For instance, France ranks at the third place according to the "Top 100 Global Innovators" survey by Thomson Reuters[1]. Its worlwide reputation is also evident in the 2012 "Nation Goodwill Observer" study led by W, Ernst&Young, Havas Design+, HEC paris and Cap[2].

[1] http://top100innovators.com/
[2] http://www.hec.edu/Press-room/News/Nation-Goodwill-Observer-study-results-are-in!

However, according to the 2014 European Commission Innovation Scoreboard, and despite some strong points like human capital and excellence of research, France only belongs to the "follower" category (that is its innovation performance is above but close to that of the EU average) while Germany is a "leader". Italy appears as a "moderate innovator".

The technology intensity (as measured by the high and medium-high technology sectors' share as a percentage of total manufacturing value added) is decreasing in France contrary to its main European partners and competitors. In 2010, the share was only 41% while it reached 46% in 2007. According to the European commission analysis, the decline is mainly due to decreasing weight of medium technology sectors (including electrical machinery, motor vehicles, chemicals, other transport equipment and non-electrical machinery). On the contrary, high-technology sectors have remained resilient (aerospace, pharmaceuticals, computers, office machinery, electronics-communication, and scientific instruments).

Graph 3.19: **Share of value added in high and medium-high technology sectors (selected countries, in % of VA)**



Source: Commission services

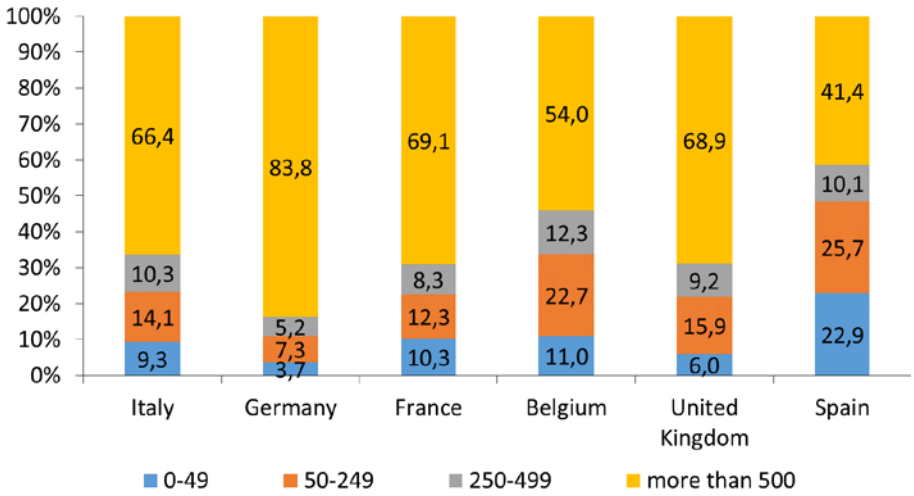
Italy: the challenge of matching small size with innovation

In Italy, private sector spending is particularly low by international standard. In 2012, R&D of firms amounted at 0.69% of GDP (€10.8 billion), against 1.3% in the EU average and nearly 2% in Germany (€52.1 billion). Business expenditure accounted for €10.8 billion (55% of the total, against 63% in the EU average and 67% of a €78 billion total expenditure in Germany).

In 2011, Italian firms with more than 250 employees spent €8.3 billion on R&D, almost 80% of total business expenditure, as in France, but more than 10 percentage points below Germany.

Business enterprise R&D expenditure by size class

(% of total; size by the number of employees; 2011; source: Eurostat)



According to Eurostat Community Innovation Survey for the 2008-10 period, the share of firms that invest in R&D is 18.7% in Italy, against 22.9% in France and about 30% in Germany. The share of firms doing R&D increases with size, rising to 35.4% for those with 50-249 employees and to 49.1% for the largest. As a proportion of sales, R&D expenditure amounted to 0.7% in Italy, about half of the German value.

In Italy, innovation is impeded by firms' small size and largely family-based management model. However, data on R&D expenditure may underestimate the true extent of innovation efforts as small firms frequently innovate without officially recording any outlay. According to Eurostat's survey, enterprises reporting innovation activity are 56% of total in Italy well below Germany (79%) but above France (53%).

In Italy innovative firms are

56%

of the total number

Low equity disadvantages R&D as firms' leverage stays at

48%

in Italy

In Italy the share of R&D spending financed by venture capital is

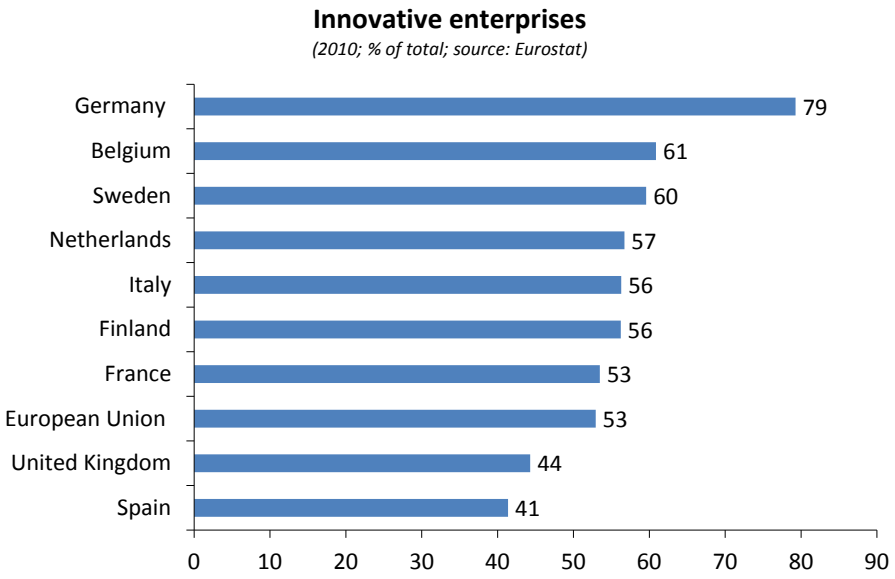
0.1%

of the total

In Italy students in science, maths and computing are

2.3%

of 20-29 population



Start-up firms, which are often those that introduce the most disruptive innovations, have greater need of external venture capital. In Italy, the share of R&D spending financed with venture capital is 0.1%, as against 0.3% in France and Germany and 0.4% in the United Kingdom. In 2011 and 2012, tax incentives were introduced for investors in venture capital funds and in the risk capital of innovative start-ups. A “fund of funds” has been foreseen for co-investing in venture capital funds, to act as a corporate catalyst and incubator by supporting the investments of angel investors.

Innovative activity in Italy suffers from the inadequacy of public policies to support R&D spending in the private sector. Public resources for R&D and innovation in Italy amounted to 0.059% of GDP in 2012. Government incentives for R&D and business innovation have delivered modest results. Their effectiveness has been impaired by the piecemeal nature of interventions, regulatory instability and uncertainty over disbursement timeframes, and the distribution of resources among a high number of beneficiaries.

Italy suffers from a shortage of highly educated workers. According to the Bank of Italy Survey of industrial and service firms with 20 or more employees, 40% of Italian business signals shortage of skilled workers as one of the main obstacles to innovation. In Italy, students participating in tertiary education in science, mathematics and computing are 2.3% of total population aged 20-29, lower than the European average (3.2%), as well as the French and Germany values (3.6% and 3.7%).

HOW TO SUPPORT INNOVATIVE ENTREPRENEURSHIP

France: creating a more business-friendly and industry-oriented environment

Measures to boost competitiveness have been launched for many years in France. The research tax credit, for example, was strengthened in 2004 and 2008, and has rapidly taken on growing importance. Competitiveness clusters, launched in 2004 have also been relatively effective, even though there is still room for improvement. The creation of OSEO, the public bank for small and mid-sized businesses, in 2005, the economy modernisation law and the creation of the auto-entrepreneur self-employed status in 2008, and the Big Loan of 2009 with its investments in the future are all measures to boost competitiveness.

Today's reform agenda is pursuing the same goal. The Competitiveness Pact of November 2012 was the first cornerstone of this new strategy. Far from a shock treatment, it nonetheless provides a comprehensive response to the lack of competitiveness, by acting on both price (notably via the €20bn CICE tax credit) and non-price competitiveness through a large variety of measures addressing lots of France's weaknesses. Eight levers of competitiveness and 35 decisions were identified in the pact, establishing a roadmap that is being quite scrupulously followed. All these "decisions" are part of the same broad pro-growth strategy but they do not have the same impact and significance.

The measures announced throughout 2013 and in early 2014 were all derived from the pact: innovation, financing for SMEs, venture capital, streamlining, reinvigorating industry, attractiveness, and support for entrepreneurs.

The Responsibility Pact is the most recent attempt to restore confidence, competitiveness, employment and growth. It proposes to reduce employer charges (by €10bn) in exchange for hiring, financed by public spending savings. This is one more step in the right direction, and a bigger one than previous measures since it clearly spells out its supply-side approach.

What has been done in France

ISSUE	*MAIN MEASURES*
1-SMEs financing	***Creation of the Public Investment Bank; fight against late payments; launch of a dedicated fiscal measure to enhance venture capital investment***
2-Lack of R&D, innovation	***Research Tax Credit; competitiveness clusters; Investment in the Future Programme (PIA); Innovation 2030 Commission***
3-Smallness of the industry sector	***34 industrial renewal plans***
4-Enhance France's attractiveness	***Creation of the Attractiveness council***
5-Unfriendly business environment	***Enshrine key tax measures in favour of R&D and entrepreneurship; 'simplification shock'***
6-Structural reforms	***Competitiveness pact, Responsibility pact, flexicurity agreement, vocational training, pensions reform, unemployment benefit reform, social dialogue modernisation bill…***

Details of France's Competitiveness Pact

Name of the measure	**Progress**
Degree of progress (BNPP gauge): 1 = long-term measures that will take time to implement; 2 = measures that could be set up rapidly; 3 = measures already in place.	
Policy lever 1: Competitiveness and employment tax credit	
1/ CICE tax credit	3
Policy lever 2: Access to effective, local financing for SMEs	
2/ Public guarantees to provide cash for SMEs	2
3/ Fight against late payments	2
4/ Creation of the Public Investment Bank (BPIFrance)	3
5/ Savings tax reform	1
6/ Encourage banks to focus on core business	1
7/ Provide SMEs with better access to capital markets	1
Policy lever 3: Stimulate innovation and higher value added products	
8/ Support innovation	1
9/ Spread digital technology and applications	1
10/ Provide new direction to competitiveness clusters	1
Policy lever 4: Working together to produce	
11/ Re-establish the National Industry Conference	2
12/ Set up a business line strategy	1
13/ Associate all components of the company in this strategy	2
Policy lever 5: Strengthen internationalisation and enhance France's own attractiveness	
14/ Tailored funding for international expansion	2
15/ Export financing	2
16/ Increase international corporate internships (VIE) by 25% over 3 years	2
17/ Attract major projects and foreign talent to France	1
18/ Launch a "made in France" brand	1
19/ Deploy very-high-speed broadband	1
Policy lever 6: Offer youth and employees training and jobs opportunities	
20/ Adapt training programmes to the need for skills	1
21/ Ten regional platforms to support job transfers	1
22/ Strengthen the role of companies in career education	2
23/ 500,000 apprenticeships by 2017	2
24/ Create individual training accounts	2
25/ "International mobility 2020"	1
Policy lever 7: Facilitate corporate life through a simpler, more stable regulatory and tax environment	
26/ Stabilise five key tax measures	3
27/ Simplify corporate administrative procedures	2
28/ SMEs tests	2
29/ Fiscal streamlining	2
Policy lever 8: Ensure exemplary public services and structural reforms on behalf of competitiveness	
30/ Public finances rebalancing	3
31/ Structural reforms	1
32/ Public purchases in favour of SMEs	1
33/ A more effective commercial court	1
34/ Creation of a new think tank focused on long-term economic analysis	2
35/ Recommendations from independent experts on European decisions	1

Italy: higher R&D with less bureaucracy and firms' networks

During recent years, work began to reorder, rationalize and rethink national programmes of incentives to firms. Some rules have been abrogated, while measures to ease procedures have been amended.

A Fund for Sustainable Growth was established, and is addressed to three main initiatives: promoting of R&D and innovation projects, including through joint research centres; reinforcement of the productive structure, especially in

In Italy R&D enhancement asks for

simpler regulations

In Italy R&D may be spurred by earmarking incentives for researchers

under 40

In Italy R&D by SMEs could be helped by wider use of

"reti di imprese" (business networks)

In Italy R&D promotion asks for

academic spin-offs

Southern Italy; promotion of the internationalisation of Italian firms and attraction of direct investment from abroad.

Ten per cent of the Fund for Investment in the Scientific and Technological Research has been earmarked for researchers under the age of 40, and a tax credit has been established for the hiring of highly qualified workers to be kept employed for at least three years.

In the last years, several measures have been approved to help to create and develop innovative start-up, such as business incubators, which until now have been primarily public. The interventions aim to activate synergies among research centres, universities and private enterprises in certain geographical areas. They also include policies for technology districts and science and technology parks.

To cope with the small size of business problem, new rules to ease and stimulate the creation of structured and regulated network between firms have been taken, making more affordable the high fixed costs associated with starting innovative projects. The creation of “business networks” (“reti di imprese”) increase the incentive to invest in innovation.

Recent legislative initiatives aimed at improving the efficiency in teaching. An incentive scheme has been created for sustaining excellence in instruction at the secondary and post-secondary levels.

In line with the European target, a plan is under discussion where research and innovation projects related to strategic issues are contemplated, with the aim of encouraging synergies between firms and research entities. New incentives and frameworks should be put in place to enhance cooperation between industry and universities.

A more stable and automatic tax credit mechanism on companies higher expenditure on R&D should be introduced. A framework of stability enables companies to make long-term plans, with investment projects that can favour the system competitiveness.

The development of academic spin-offs should be fostered, by also including them in a university business joint planning activity. Incentives should be promoted to spur large corporations to escort spin-off companies through the globalization process.

Some actions should be taken to reshape the sectoral composition of Italian industry, strengthening the share of more innovative activity. According to some estimates, if Italy had the same sectoral composition as Germany, the gap in terms of the share of manufacturing firms that engage in R&D would narrow by around 10%.

What has been done in Italy

ISSUE	*MAIN MEASURES*
1-SMEs financing	***Project of creation of a "Fund of Funds" dedicated to co-investing in venture capital fund. Development of alternative sources of financing (mini-bond).***
2-Lack of R&D, innovation	***Fund for Sustainable Growth to promote R&D and innovative project. 10% of the Fund for Investment in the Scientific and Techinological Research for researchers under the age of 40.***
3-Smallness of the Italian firms	***New rules to ease the creation of structured and regulated "business network" ("reti di imprese").***
4-Enhance Italy's attractiveness	***Plan to attract foreign direct investment ("Destinazione Italia").***
5-Unfriendly business environment	***Tax credit for the hiring of highly qualified workers.***
6-Innovative firms	***Measure to help to create and develop innovative start-up. Policies for technology district and science and techinology parks.***
7-Structural reforms	***Labour market, pension system, public administration, justice system, fiscal system, regional policies…***