

Booklet Italy, Lombardy and Milan

A cura dell'Area / Edited by
Centro Studi / Research Unit
N° 03/January 2017





Contents

1.	. Italy and Lombardy: perception and reality	5
•	Italian public debt: 132.3% of GDP but only 68% of household net financial assets	
•	Italian primary surplus: the highest cumulated value	
•	Explicit and implicit debt: Italy «tops» the EU sustainability ranking	
•	Italian manufacturing export performance 2000-2015	
•	Italian manufacturing sector in global rankings	
2.	. Lombardy and Milan: business structures	11
•	The leading Italian Region: in 2015, 22% of the Italian GDP	
•	Lombardy in comparison: the leading Italian Region in terms of manufacturing gross value added	
•	250 medium-sized enterprises of manufacturing sector are located in Milan, 1,000 are located in Lombardy	
•	123 large enterprises in Milan	
•	Milan as prime location for multinationals operating in Italy: over 3,000	
•	Over 12,000 knowledge-intensive startups born in Lombardy (2007-2013)	
•	Export: Lombardy vs other European Region	
•	Export: main commercial partners of Lombardy	
•	Openness to international trade: overtaking the German Länder	
•	also worthy of mention: the importance of export % over total turnover	

Contents

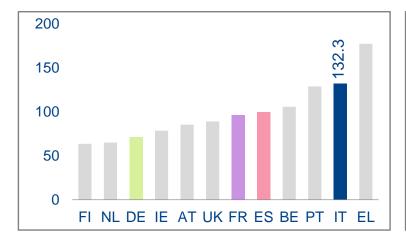
3. Lombardy and Milan: their strengths

22

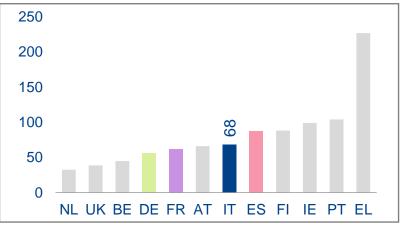
- R&D investments made by businesses in Lombardy: aligned to the German Länder
- Research and innovation
- Innovation: the role of Lombardy in Italy
- · Strong presence of public and private high quality research centers
- University: high concentration (13) and international attractiveness
- Universities: Politecnico of Milano and Bocconi as examples of excellence
- Lombardy is a driver of Italian creativity
- Labour market: a better performance vs the Italian average
- Labour market: high female employment rate
- What makes Lombardy and Milan a knowledge hub?
- Milan S.T.E.A.M. city

Italian public debt: 132.3% of GDP but only 68% of household net financial assets

Public debt as percentage of GDP - 2015



Public debt as percentage of household net financial assets (*) - 2015

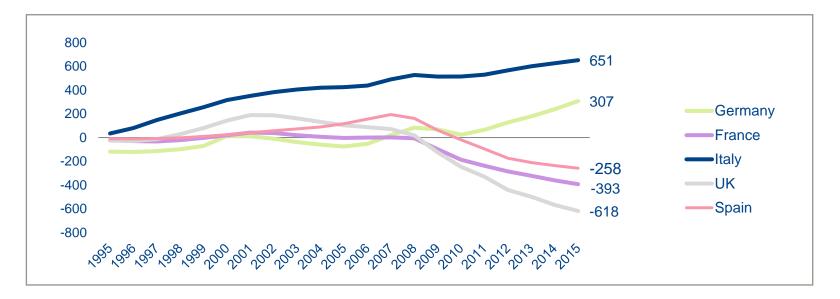


(*) Financial assets held by households include: currency and deposits, securities other than shares, loans, shares and other equity, net equity of households in life insurance reserves, net equity of households in pension funds, prepayments of premiums and reserves against outstanding claims

Italian primary surplus: the highest cumulated value

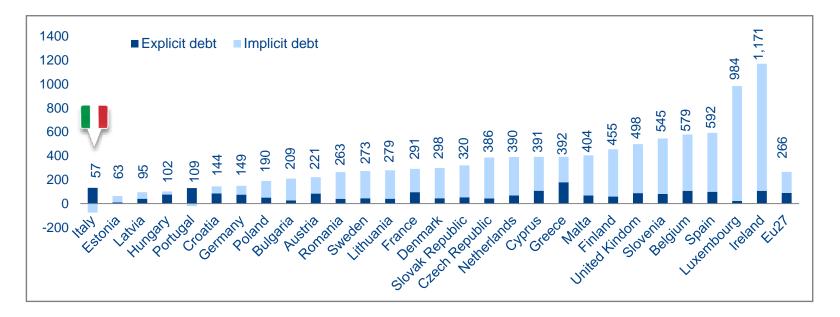
Cumulated primary balances

(current values – billions of euro)



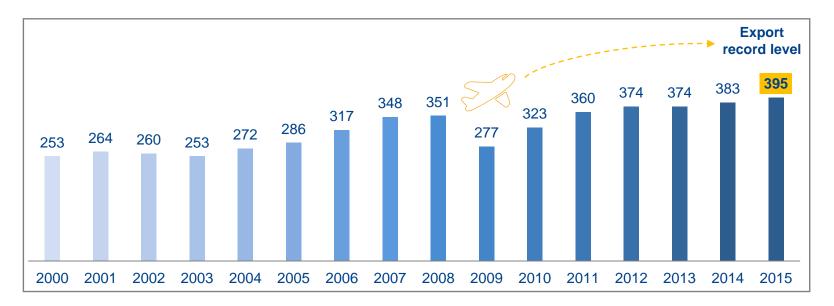
Explicit and implicit debt: Italy «tops» the EU sustainability ranking

EU Sustainability Ranking - 2015 (explicit and implicit debt as % of GDP)



Italian manufacturing export performance 2000-2015

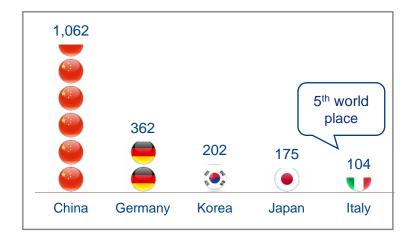
Italian manufacturing export (billions of euro)



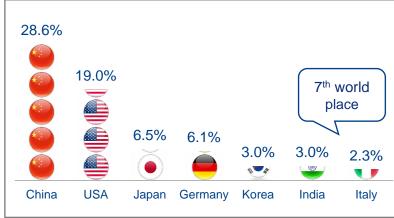
Source: Tableau de bord Assolombarda Confindustria Milano Monza e Brianza on Istat data

Italian manufacturing sector in global rankings

Manufacturing trade surplus - 2015 (US billion dollar)



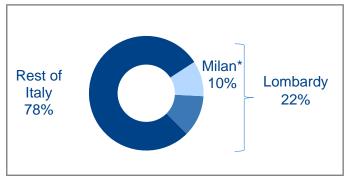
Share (%) of global manufacturing value added - 2015 (%, current prices, US dollar)



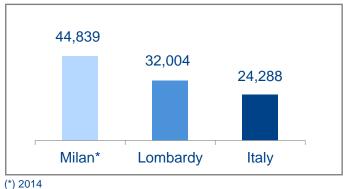
The leading Italian Region: in 2015, 22% of the Italian GDP

	Lombardy	Italy	Share
Area (square Km)	23,864	302,073	7.9%
Population (1/1/2016)	10,008,349	60,665,551	16.5%
Workforce (thousand, 2015)	4,620	25,498	18.1%
GDP (nominal, millions euro, 2015)	359,047	1,642,444	21.9%
Value Added (per capita, 2015)	32,004	24,288	-
Enterprises (2014)	807,466	4,359,087	18.5%
R&D expenditure (millions euro, 2014)	4,625	22,291	20.8%
Import (millions euro, 2015)	116,162	370,484	31.4%
Export (millions euro, 2015)	111,341	412,291	27.0%

Gross Domestic Product % - 2015



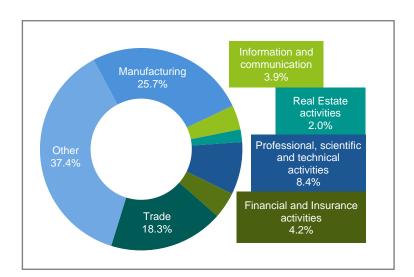
Value Added per capita - 2015 (euros)



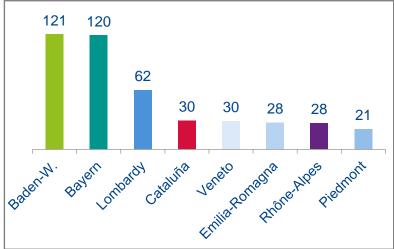
Source: Tableau de bord Assolombarda Confindustria Milano Monza e Brianza on Istat data

Lombardy in comparison: the leading Italian Region in terms of manufacturing gross value added

Lombardy workforce by business sector - 2014



Gross value added at basic prices by region - 2013 (Manufacturing, billions of euro)



250 medium-sized enterprises of manufacturing sector are located in Milan, 1,000 are located in Lombardy

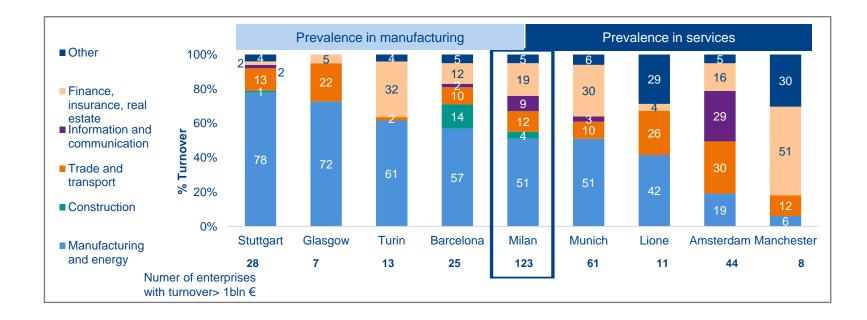
Number of medium-sized manufacturing companies, with a workforce comprised between 50 and 499 employees, sales volume between 15 and 330 million euros (excluding subsidiaries of large corporations or those under foreign control)



Source: Tableau de bord Assolombarda Confindustria Milano Monza e Brianza on Mediobanca - Unioncamere data

^{*} Italian medium-sized manufacturing companies account for approximately 15% of the domestic manufacturing value added and of Italian exports

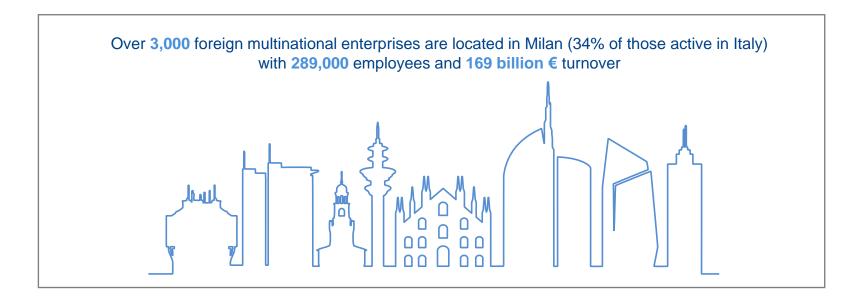
123 large enterprises in Milan



Source: Tableau de bord Assolombarda Confindustria Milano Monza e Brianza on BCG data

Milan as prime location for multinationals operating in Italy: over 3,000

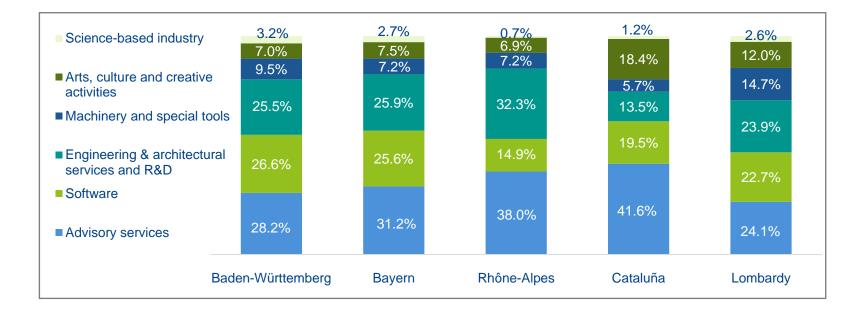
Foreign multinational enterprises



Source: Tableau de bord Assolombarda Confindustria Milano Monza e Brianza on Milan Chamber of Commerce data

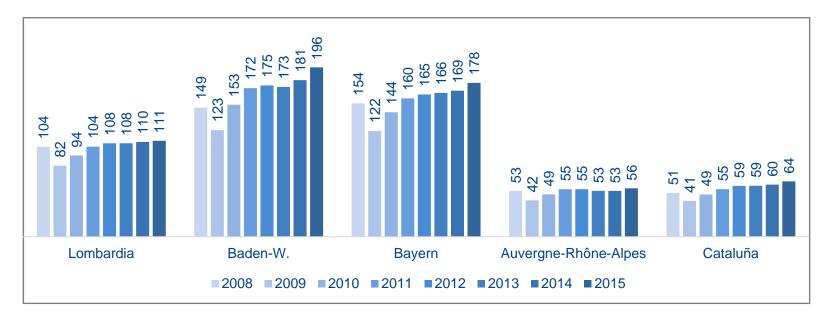
Over 12,000 knowledge-intensive startups born in Lombardy (2007-2013)

12,121 knowledge-intensive startups - out of 52,675 located in Italy - born in Lombardy (2007-2013)



Export: Lombardy vs other European Regions

Export (billions of euro)



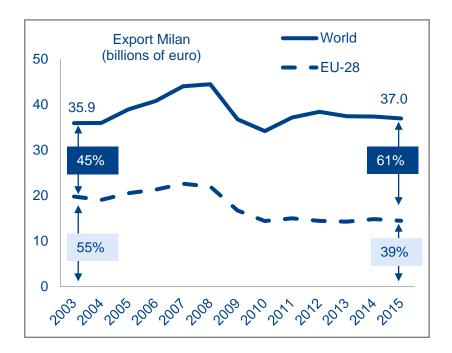
Source: Tableau de bord Assolombarda Confindustria Milano Monza e Brianza on Istat, Destatis, Idescat, Douanes et droits indirects data

Export: main commercial partners of Lombardy

Main Commercial partners: the case of Lombardy - 2015 (millions of euro)

		Export 2015	% change 2015-2008
1	Germany	14,825	3.8%
2	France	11,257	-7.6%
3	USA	8,240	40.2%
4	Switzerland	6,411	28.1%
5	Spain	5,884	-9.1%
6	United Kingdom	5,319	12.5%
7	China	3,421	42.4%
8	Poland	2,952	12.4%
9	Netherlands	2,750	4.8%
10	Turkey	2,659	30.3%

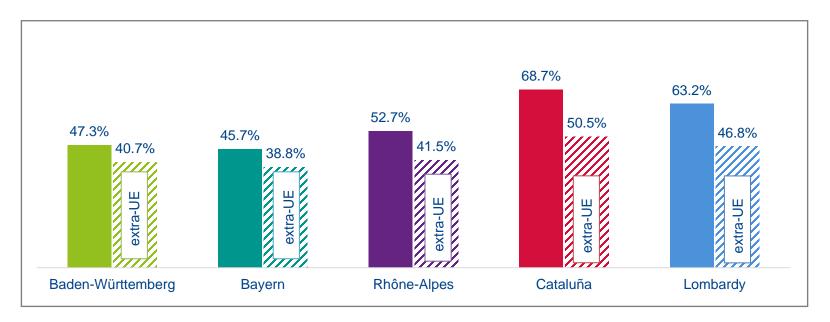
Repositioning on Extra-EU markets: the case of Milan - 2015



Source: Tableau de bord Assolombarda Confindustria Milano Monza e Brianza on Istat data

Openness to international trade: overtaking the German Länder ...

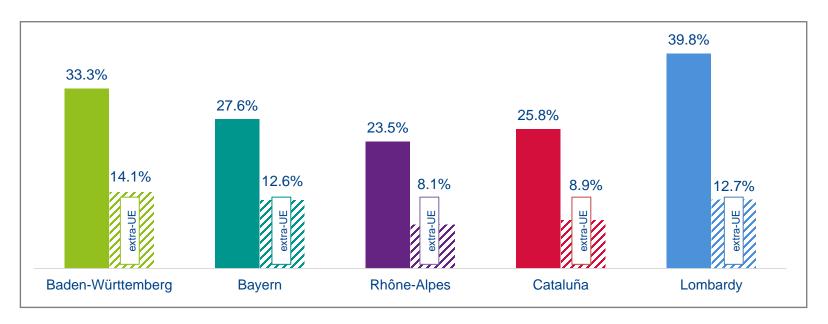
Manufacturing exporting firms - 2013 (% of firms)



Source: Tableau de bord Assolombarda Confindustria Milano Monza e Brianza on Assolombarda Confindustria Milano Monza e Brianza, *The performance of European firms: a benchmark analysis*

... also worthy of mention: the importance of export % over total turnover

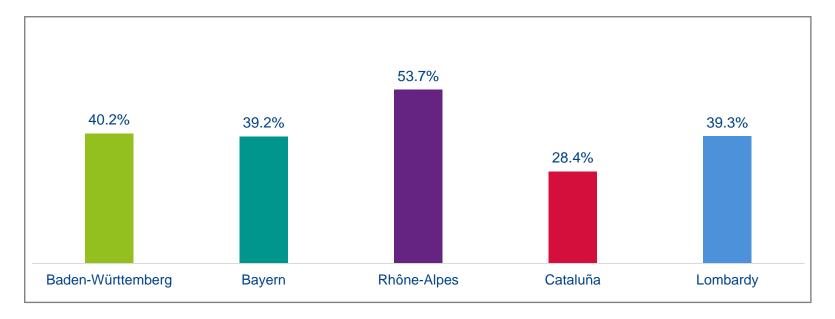
Export turnover of manufacturing firms – 2013 (% over total turnover)



Source: Tableau de bord Assolombarda Confindustria Milano Monza e Brianza on Assolombarda Confindustria Milano Monza e Brianza, *The performance of European firms: a benchmark analysis*

R&D investments made by businesses in Lombardy: aligned to the German Länder

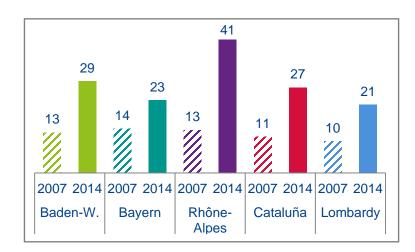
R&D activity in manufacturing – 2011-2013 (% of firms)



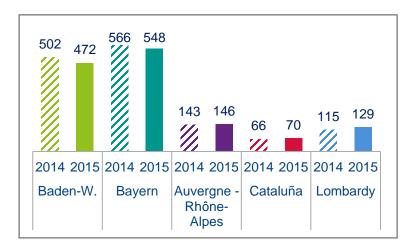
Source: Tableau de bord Assolombarda Confindustria Milano Monza e Brianza on Assolombarda Confindustria Milano Monza e Brianza, *The performance of European firms: a benchmark analysis*

Research and innovation

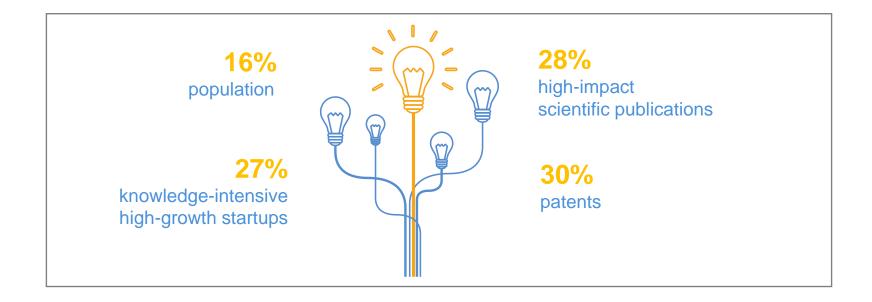
S.T.E.A.M highly cited articles per million inhabitants



Patents per million inhabitants



Innovation: the role of Lombardy in Italy



Source: Tableau de bord Assolombarda Confindustria Milano Monza e Brianza on Istat data, Politecnico of Milano, CRIOS Bocconi

Strong presence of public and private high quality research centers

13 Universities



3 sections of Italian National Institute for Nuclear Physics and one European Joint Research Center

1 Institute for Advanced Study

12 CNR (National Research Council) Institutes and 18 territorial sections of CNR Institutes



19 Institutes for Treatment and Research

University: high concentration (13) and international attractiveness

In Lombardy

270,000 university students

Just under 13,000 international university students (of which almost 10,000 in Milan)

equal to 5% of the total number of students

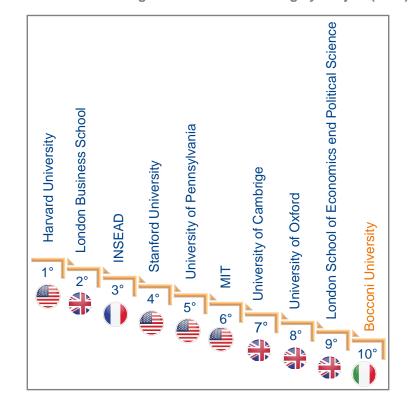
This figure is **10%** in France **7%** in Germany **2%** in Spain

Universities: Politecnico of Milano and Bocconi as examples of excellence

Engineering and Technology: Ranking by faculty (2015)

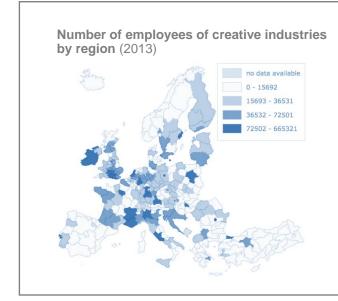
	University			
1	Massachusetts Institute of Technology (MIT)			
2	Stanford University			
3	University of Cambridge			
4	National University of Singapore (NUS)			
5	ETH Zurich - Swiss Federal Institute of Technology			
6	Nanyang Technological University, Singapore (NTU)			
7	Imperial College London			
8	University of California, Berkeley (UCB)			
9	University of Oxford			
10	Harvard University			
11	Tsinghua University			
12	The University of Tokyo			
13	KAIST - Korea Advanced Institute of Science & Technology			
14	The Hong Kong University of Science and Technology			
15	Seoul National University			
16	California Institute of Technology (Caltech)			
17	EPFL (Ecole Polytechnique Fédérale de Lausanne)			
18	The University of Melbourne			
19	Delft University of Technology			
20	Georgia Institute of Technology			
21	The University of New South Wales (UNSW Australia)			
22	Tokyo Institute of Technology			
23	University of California, Los Angeles (UCLA)			
24	Politecnico of Milano			
- '	Princeton University			

Business & Management Studies: Ranking by subject (2016)



Source: Tableau de bord Assolombarda Confindustria Milano Monza e Brianza on QS Ranking data

Lombardy is a driver of Italian creativity



Lombardy tops the ranking of Italian regions and is also a leader at European level regarding workforce employed in creative industries

19% of Italian cultural businesses

26% of Italian value added cultural businesses

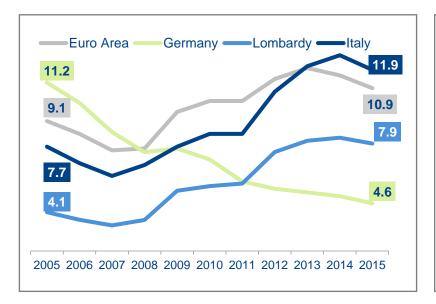
300,000 jobs provided by the sector of culture

In Lombardy between 2007 and 2013, almost **1,500** knowledge-intensive startup were born in the arts, culture and creative industry sectors

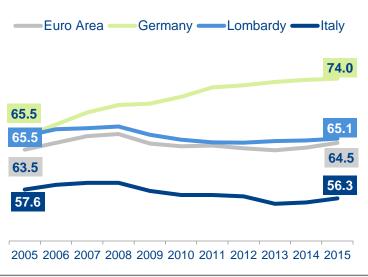
Source: Tableau de bord Assolombarda Confindustria Milano Monza e Brianza on Symbola data, Assolombarda Confindustria Milano Monza e Brianza, Politecnico of Milano, Booklet Startup, European Cluster Observatory data

Labour market: a better performance vs the Italian average

Unemployment rate



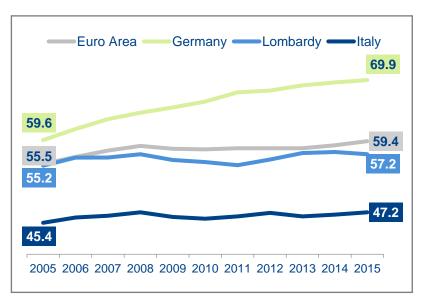
Employment rate



Source: Tableau de bord Assolombarda Confindustria Milano Monza e Brianza on Istat and Eurostat data

Labour market: high female employment rate

Female employment rate



In Lombardy the female employment rate is aligned to the objectives stipulated by Lisbon 2010, thanks to:

- → ...more **opportunities** for women to reach relevant positions/roles in their firms...
- ...diffusion of part-time contracts (25% among working women)...
- → ...welfare initiatives both by large private companies and public institutions (78% of municipalities provide services for children, such as kindergarten).

What makes Lombardy and Milan a knowledge hub?

Because here you find:

- a multi-sectorial economic system, with a core manufacturing sector integrated with a highly developed service sector (especially in Milan);
- a virtuos network of small and medium enterprises well integrated with large enterprises and multinational companies;
- the concentration of 13 long-standing and prestigious universities, closely connected to the entrepreneurial system;
- a strong specialization in knowledge-intensive sectors and the availability of high-skilled human capital.



Milan S.T.E.A.M. city

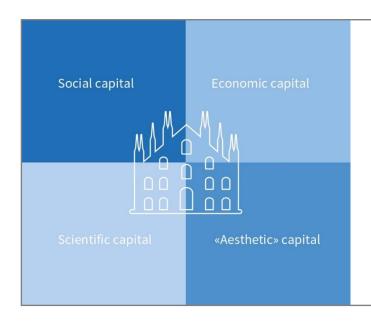
STEAM as an acronym of Science, Technology, Engineering & Environment, Arts, Manufacturing



Science
Technology
Engineering&Environment
Arts
Manufacturing

Milan S.T.E.A.M. city

The strength of Milan originates from the unique and distinctive blend of four assets:



- dynamic and supportive social capital
- rich and diversified economic capital
- top-grade scientific capital
- widespread "aesthetic" capital, ranging from art to design and to craftsmanship

Milan S.T.E.A.M. city

STEAM - our vision: 4 enablers, 3 strategic levers and 4 innovation pathways

4 enablers

- A simple and digital city
- A quick and accessible city
- Quality human capital
- An inclusive city





3 strategic levers

- Innovation
- Startup
- Global outreach

4 innovation pathways

- Life sciences
- Manufacturing 4.0
- Art, culture e creativity
- Sustainable economy





www.assolombarda.it www.farvolaremilano.it www.assolombardanews.it





