



Milan and Turin: Competitiveness of Italy's great northern cities

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Foreword

ULI is pleased to publish this research report analysing the international competitiveness of Milan and Turin, two of Italy's major cities. The report is launched at ULI Italy's inaugural Annual Conference, themed around competitive cities.

The challenge of developing and maintaining a competitive edge is of importance for cities around the world. In Italy, this issue is framed by distinct pressures and challenges posed by the country's history and strategic role in Europe. In some sectors, such as the creative and innovation sectors, businesses and talent have become increasingly mobile and attracted to cities that offer both liveability and innovation. At the same time, investors focus exclusively on cities. In this context, competition amongst cities for investment and talent is significant. Based on ULI's longstanding research focused on cities, we have developed a framework to assess the competitiveness of cities, addressing a variety of factors ranging from the governance framework and regulatory issues to softer issues, such as liveability and social integration.

This report reviews the key competitive strengths and weaknesses of Milan and Turin and makes a series of concrete recommendations. These will be useful to all those in the public and private sectors who wish to take action to enhance the competitiveness of these two cities.

We hope you will enjoy reading this report and that it will increase awareness of the issues surrounding the competitiveness of Milan and Turin, and cities more broadly.

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Milan Cathedral. (Javarman3/iStock)

Executive Summary

Governance framework	Competitive climate	Agglomeration	Attractiveness to talent
Vision, strategy, and coordination	Costs and business investment	Size and scale of internal market	Human capital, liveability, and opportunity
Land use, planning system, and density	Tax and regulatory framework	Clustered specialisations	Innovation, technology, and enterprise
Infrastructure and services	Political risks	Institutional engagement	Brand, identity, and destination

This report assesses the competitiveness of Milan and Turin from a global perspective and offers recommendations for how the cities can adapt to become more competitive.

It is based on research carried out by ULI in autumn 2017 that included workshops with ULI members and other public and private sector leaders in Milan and Turin, interviews with Italian urban specialists, and a review of the two cities against recognised measures of international performance. In addition to this report, the research produced two detailed case studies of the competitiveness of the two cities. The report and the two case studies are intended to be read together.

In assessing the competitiveness of Milan and Turin, this report uses a framework that consists of four main elements:

- **governance framework**
- **competitive climate**
- **agglomeration**
- **attractiveness to talent**

The findings regarding Milan and Turin's competitive strengths and weaknesses according to this framework – with a strong focus on the metropolitan and regional dimension of competitiveness – are summarised in figures 1 and 2. The areas in which the cities rate above average are their competitive strengths; those where they rate below average are areas where it is imperative that they improve.

Summary of findings: Milan

Milan's competitiveness and confidence have recovered over the past five years. Following a period during which other European cities moved ahead of it, Milan has now benefited from an improved city government, the rapid evolution of its knowledge and innovation economies, and a succession of public/private projects which are now bearing fruit. The city is now enjoying a large influx of talent and a resurgent visitor economy, and is rebuilding and promoting its DNA of design, knowledge, innovation, and culture, all underpinned by the scale and dynamism of its much wider region – Grande Milano, with a population of 8 million.

Competitive advantages

- **A highly attractive inner city** that is a business capital, a centre for technology, and a hub for advanced manufacturing, all grounded in a distinct set of districts and neighbourhoods. This urban core offers many lifestyle benefits to talent in different age brackets.
- The support of a **large, diversified, and innovative region** (Grande Milano) that hosts numerous competitive clusters united by entrepreneurial DNA. This wider region provides the scale, complementarities and institutions for Milan to become a European and global powerhouse.
- **A civil society that is very active**, and civic and business leaders that have a proven ability to create public/private teams and mount attractive projects offering strategic and high-value opportunities.
- **Direct and indirect costs of doing business** that have fallen relative to those of other European cities. National economic recovery and reforms to tax, regulation, and incentives are helping Milan attract greater numbers of companies, investors, returning former residents, and international talent.¹

Competitive threats

- **A fragmented governance system** with many municipalities that makes it hard to mount visionary strategic planning and leads to competing land uses, a slower pace of change, a limited scale of initiative, and unequal outcomes.
- Perceptions that the **quality of life lags behind** that of its peers in northern Europe because of real and perceived disadvantages in terms of congestion, pollution and access from the outskirts to the centre.
- **Dis-economies of scale**, including high costs of transport and public services, fragmented clusters, weak co-operation between firms and universities, and duplicated economic initiatives.
- Mixed international **perceptions about the costs and risks of doing business**, which are shaped and informed by Italy's weak business brand and which despite Milan's attractiveness relative to perceptions of Italy, require national-level reforms and solutions.²

Milan's competitive performance varies substantially according to whether the entire region or just the city is being measured. Illustrating this divergence, figure 1 evaluates Milan against European peer cities, but also features the relative performance of the Milan region.

Because of its recent cycle of progress, the city of Milan performs well in terms of infrastructure, and its improved leadership means land use and density are increasingly competitive. The city also has a strong brand and offers economic opportunity and appeal for talent compared with the wider region as a whole. Conversely, it is at the regional scale that the benefits of agglomeration become much more apparent. However, in order to address the region's deficits in terms of fragmented governance, connectivity, land use, and competitive climate, a series of combined efforts will be required. As an organised region, Milan has clear potential to become one of Europe's most competitive locations.

Figure 1: Illustrative evaluation of Milan according to 12 competitiveness criteria

Note: The wider Milan region is represented by the dotted lines where its performance differs from the core city.

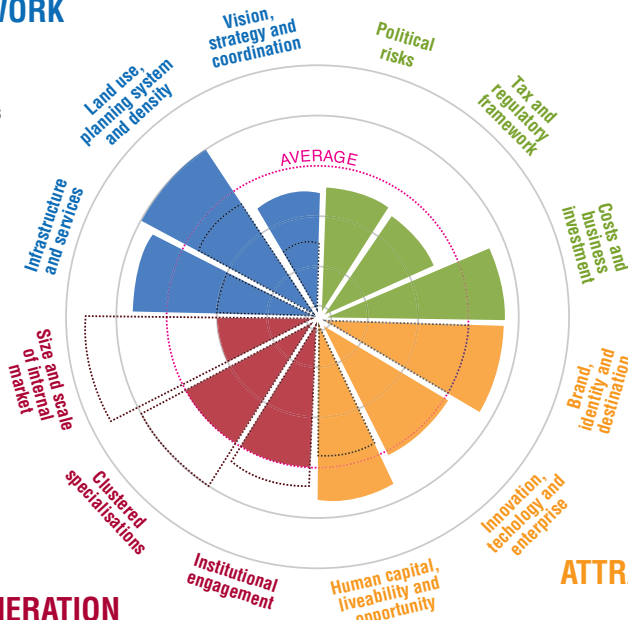
GOVERNANCE FRAMEWORK

COMPETITIVE CLIMATE

- Milan vs Peers**
- Amsterdam
 - Berlin
 - Stockholm
 - Madrid
 - Barcelona
 - Vienna
 - Frankfurt
 - Brussels
 - Rome

AGGLOMERATION

ATTRACTIVENESS TO TALENT



Recommendations

- Milan should sustain its existing momentum and continue its current focus on high impact projects. To aid and encourage its growing recovery and resurgence, Milan needs to **tell its story of transformation** more effectively and more powerfully to demonstrate the confidence that investors and talent have shown in the city already, and to give its many transformation projects more visibility and coherence. It should promote an agenda about the kind of city it wants to be in the next 20 years, and how its process of change contributes to innovation and leadership in relation to the future of the world and its cities.
- Milan should pursue development of the **northern Italy and Alpine region** as an increasingly integrated and competitive economic unit. Given the complementary strengths of Milan and Turin, plus improving regional connectivity, the region's largest cities should expand their joint positioning and knowledge sharing while retaining their strong individual identities. This should also encourage an Alpine 'system of cities' approach that helps both Milan and Turin grow and flourish.
- Milan's business leaders should prioritise **'softer' governance solutions** – public/private partnerships (PPP), catalytic projects, brand management, and strategic planning that build alliances across borders, and set examples for government. The roles of Barcelona Global as a business and civic leadership platform, and Stockholm Business Region as a multi-municipal partnership for investment, can both provide inspiration for Milan. Real estate companies, universities, airports, trading firms can all take a lead in identifying priorities for collaboration.

- Milan should **differentiate its business climate** and level of transparency from Italy's less favourable business brand. As well as supporting good national policy, Milan should demonstrate that its own strong systems of city government, management, and transparency insulate it from perceived national risks.

Summary of findings: Turin

Turin has made remarkable progress since its most acute period of industrial crisis. The city's identity as a forward-thinking, confident, and historic post-industrial city reached a high watermark of coherence and clarity before the global financial crisis when it hosted the 2006 Winter Olympics.

Over the past ten years, however, Turin's momentum has stalled. The city retains its niche capabilities in design, engineering, and advanced manufacturing, but it has struggled to protect its employment base and create the conditions to spark its startup scene. The long economic slowdown and related social challenges have eroded the city's self-confidence and sense of direction, resulting in the need for new sources of leadership to emerge.

Competitive advantages

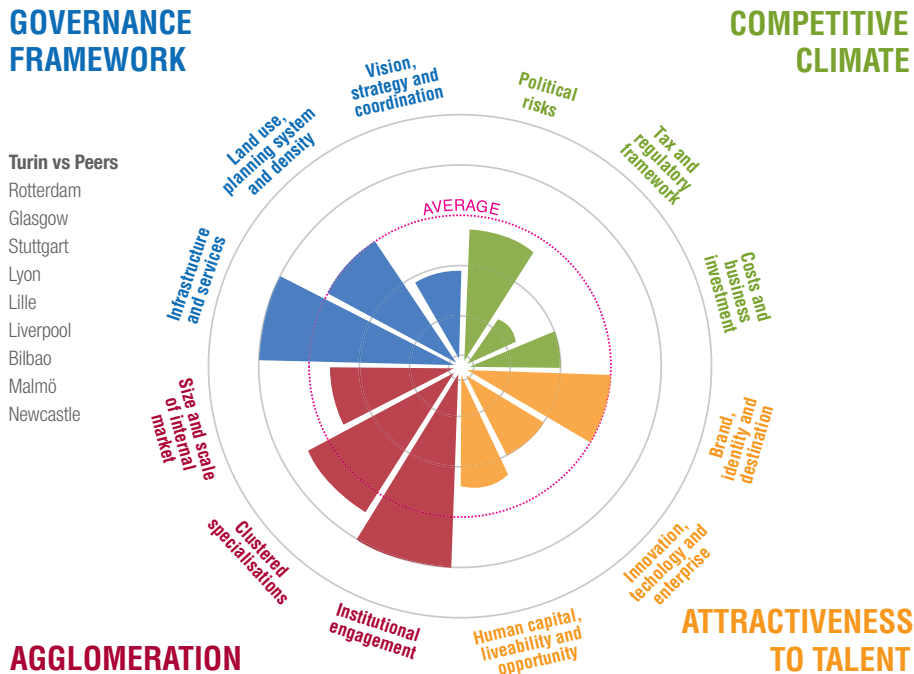
- **A high quality of place and inherited DNA of openness and innovation.** Recent investment in the arts, culture, public squares, infrastructure, and street life have made the city a more attractive, appealing, and affordable location for families and talent. The city's capabilities in design, engineering, automotive, and social innovation can underpin the next cycle of innovation.

- **A newly defined metropolitan territory** that combines Turin's rural and urban assets and is well served by existing regional infrastructure. The city has a recent history of strong collaborative city leadership, highly engaged academic and civic institutions, and it has repeatedly demonstrated the ability to deliver large scale high quality projects.
- Large **reserves of affordable industrial space** that are well located, well connected, reusable, and potentially very attractive to creative and innovative activities.
- **A diverse metropolitan market** to serve, specialisations with very good access to the central European market, and the potential to 'borrow' scale with Milan and the wider trans-Alpine region.

Competitive threats

- **Small size and lack of global reach,** which mean a limited ability to retain large corporate customers. Without further improvements to regional connectivity, and also international air links, Turin may not derive the benefits of scale offered by the region and establish clear complementary strengths with Milan and other neighbours.
- **A receding strategic agenda promoting competitiveness** and the diminished role of cross-party delivery agencies. The new metropolitan structure has few tools and responsibilities, and advocacy for shared metropolitan solutions is fragmented and uncertain.
- **Reduced appeal to local and overseas talent** because of a weak labour market, limited social mobility and integration, and high barriers to starting a business.
- **A high tax and regulatory burden** relative to other high-innovation cities in Europe, which is a deterrent to a startup culture and talent attraction.

Figure 2: Illustrative evaluation of Turin according to 12 competitiveness criteria



Recommendations

- Turin needs **civic and business leadership to create a new positive story** about the city and its future that aligns with global economic and social megatrends. A new narrative will help restore private sector confidence, build a broader and more inclusive culture of leadership in civil society, and focus attention on strategic initiatives that can gain political backing in the short term. A semi-permanent non-governmental leadership platform could support the city and metropolitan area to consistently be ambitious for its future. Turin can also learn from the alliances formed by other cities, such as the public/private promotional agency Berlin Partner, as well as Verband Stuttgart, a regional alliance and assembly of 179 municipalities.
- **A clearer offer to entrepreneurs and growth firms**, combined with a value proposition for venture capital, is a necessary first step for Turin to retain more

of its talent. The city would then be well placed to become a leader and innovator in automated vehicles, battery storage, integrated transport technology, and information technology systems.

- Turin may benefit from **smarter co-operation with Milan and the wider trans-Alpine region**. The creation of shared capability and joint projects involving institutions across the region (e.g., the Politecnico, Malpensa Airport, large firms) may offer one way forward. Turin may draw inspiration from Malmö's relationship with Copenhagen and Rotterdam's synergies with Amsterdam.
- Turin should build on the **promise of its social innovation ecosystem to address local challenges** (e.g., youth employment, inclusion, mobility, health), and demonstrate a model of socially inclusive competitiveness.

Conclusion

Milan and Turin are well placed to develop their role in the European system of cities. To make the most of their opportunities, they need to rely on their leaders in the civic and private sectors to identify catalysts, assemble projects, build alliances, and create momentum. At the same time, both cities would benefit from exploring options for greater inter-city collaboration and complementary approaches. These could include defining their sectoral strengths – mapping the flows and managing the space in between the two cities. A possible joint bid for the 2026 Winter Olympics may also prompt deeper collaboration. This would have the effect of making the whole region a more attractive prospect for international investment.

Introduction

Milan and Turin are the two most populous and most globally connected urban areas in northern Italy. Milan is Italy's major gateway for international finance, investment, and institutions, whereas Turin is the former capital city and automotive industrial powerhouse with specialities in engineering, industrial design, higher education, food, wine, and tourism. Because of their size, assets, and strategic location in the Alpine region of Europe, these two cities are essential to Italy's future competitiveness.

This report assesses the current international competitiveness of Milan and Turin and, based on that analysis, suggests how the cities can improve and sustain future competitiveness. It is intended to inform debates within Italy about city competitiveness and to highlight for an international investor audience the key assets and opportunities offered by the two cities. The assessment is based on research and analysis carried out by ULI in autumn 2017 that was designed to answer three key questions:

- In what ways are Milan and Turin able to be competitive cities?
- Which risks threaten the competitiveness of the two cities?
- How can Milan and Turin adapt to become more competitive?

City competitiveness

For economists, competitiveness is often equated with productivity. For cities, however, competitiveness is about a much broader range of factors. This report adopts a formula for competitiveness first developed by ULI in 2016 for a study with ULI Belgium of the competitiveness of Brussels and Antwerp. This broader definition is designed to encourage a robust consideration of the many factors that may influence why some cities are more competitive than others.

Methodology

The research for this report included historical and statistical research, a review of international indexes and benchmarks, and interviews with Italian urban specialists. This work fed into preliminary case studies of Milan and Turin, which were used as the basis for a discussion with ULI members and city representatives at workshops in both Milan and Turin in September 2017. The research team used information gathered in those workshops to update and improve the detailed case studies (published separately) and to inform this summary report.

This report also builds on insights in recent ULI research on density, technology, and innovation, in particular *Density: drivers, dividends and debates* (June 2015); *The Density Dividend: solutions for growing and shrinking cities* (October 2015); and *Technology, Real Estate, and the Innovation Economy* (September 2015).

The competitiveness framework

This report applies a framework for evaluating competitiveness developed by ULI that builds on work by international organisations such as the World Bank and the World Economic Forum. It assesses the competitiveness of Milan and Turin according to 12 factors within four broad pillars:

- **governance framework**
- **competitive climate**
- **agglomeration**
- **attractiveness to talent**

This framework goes beyond conventional economic competitiveness considerations such as costs, regulation, and taxation. It takes into account a broad range of issues, including how cities and their metropolitan space are governed, how strategies and projects are implemented, how innovation can be accommodated, and how firms and talent can be incentivised to come and stay. These are particularly urgent questions in an Italian context.

Report overview

The following section of this report briefly introduces and explains ULI's four-part framework for assessing city competitiveness. The third section uses that framework to evaluate the competitiveness of Milan and Turin, identifying areas of relative strength, but also short- and longer-term challenges faced by each city. The final section presents a summary of the findings about the cities' competitive strengths and risks, as well as presents recommendations for how both cities can enhance their future competitiveness.

What is City Competitiveness?

The concept of competitiveness has long been applied to companies, with firms considered competitive if they are more productive and offer something distinct to markets in comparison with their peers. This model of competitiveness understands productivity to be the essential ingredient of a firm's long-term ability to compete.

More recently, however, competitiveness has been applied to the territorial unit of a city or region. Economists and urbanists have argued that a narrow focus on productivity ignores the role of other potentially important factors, such as security, talent attraction, liveability, institutions, cluster development, leadership, coordination, vision, and trust. Productivity is now more commonly viewed as a necessary but insufficient condition for city development. Instead, a competitive city is one that:

- attracts a high share of mobile talent, capital, and business;
- provides a favourable entrepreneurial, institutional, social, and technological framework and infrastructure platform for local firms; and
- sustains these private, public, or mixed assets to achieve long-term competitive advantage.

This all means that for cities, including Milan and Turin, the factors in the equation shown in figure 3 all play a role in competitiveness.

This equation implies that **for a city to be competitive, productivity must be backed up by mechanisms to coordinate economic development, promote the city externally, and achieve long-term sustainability.**

Understood in this way, competitiveness is what allows cities to enable their businesses and industries to create jobs, drive innovation, increase productivity, attract investment, and build shared prosperity. In the context of cities, competitiveness also needs a public purpose. This definition accommodates the different needs of businesses, investors, anchor institutions, tourists, students, and residents, and the factors that affect their decisions as 'customers' of a city.

A framework for assessing city competitiveness

There is no quick recipe for becoming a competitive city. This report adopts a framework for understanding and assessing competitiveness, developed by ULI in 2016, that is made up of four categories and 12 distinct dimensions. Each element of this framework is discussed in figure 4.

Figure 3: Factors important to city competitiveness



Figure 4: ULI's competitiveness framework

Governance framework	Competitive climate	Agglomeration	Attractiveness to talent
Vision, strategy, and coordination	Costs and business investment	Size and scale of internal market	Human capital, liveability, and opportunity
Land use, planning system, and density	Tax and regulatory framework	Clustered specialisations	Innovation, technology, and enterprise
Infrastructure and services	Political risks	Institutional engagement	Brand, identity, and destination

Governance framework

Vision, strategy, and coordination

In competitive cities, leaders create a long-term vision and strategy for the future designed to improve productive capacity. For a vision to translate into action, coordinated leadership focused on the city's shared economic future is required. Cities that have created inspiring and deliverable visions regarding competitiveness usually:

- identify the city's competitive position globally;
- set out a clear pipeline of future infrastructure projects and the investment tools that will finance them;
- point to opportunities for foreign investment and emerging export markets to catalyse growth; and
- mobilise different levels of government to address a common set of objectives.

Land use, planning system, and density

The conversion of land to new uses and targeted densification is a key aspect of change in most if not all European cities, including those in Italy. As ULI's *Density: drivers, dividends and debates* report explained, density provides a competitive advantage because it offers lifestyle benefits for different demographic groups, provides sites that are easy to package for investors, and increases transport efficiencies.³ If cities are to make progress towards 'good' density, they need a robust growth plan, master-planning tools, and the power to guide how development can proceed. This is especially important to ensure that enough social infrastructure (schools, hospitals, kindergartens) and affordable housing are provided to serve a larger and more diverse population.

Infrastructure and services

Extensive and reliable hard infrastructure systems underpin competitive advantage as more industries rely on point-to-point movement of goods and people within and between regions. Rail links, roads, and port and air links provide access for workers to jobs and enable businesses and entrepreneurs to bring their goods and services to market. Increased density usually allows transport and services to function more efficiently. Reliable electricity

networks and digital and telecommunications infrastructure provide the platform for companies to conduct operations and share information with confidence. Competitive cities have high rates of infrastructure investment and coverage, but also look to create robust long-term infrastructure portfolios, speed up approval processes, and encourage better coordination between infrastructure and other public services. When these ingredients are missing, cities can become congested, and certainty for investors diminishes.⁴

Competitive climate

Costs and business investment

The cost of doing business is among the most important considerations for prospective firms operating in cities. Office and industrial space rents, energy costs, and labour costs, as well as indirect costs, have to be competitive and stable in order for a city to attract businesses. Likewise, business investment is essential to cities seeking to achieve productivity gains. Business investment creates multiplier effects by generating new jobs, increasing the stock of capital and technology in a city, and boosting economic activity. Cities need financial markets where private-sector capital investment is widely available, whether from banks, securities exchanges, private equity, venture capital, or other funds.⁵

Tax and regulatory framework

The legal and administrative framework in which companies, investors, and individual actors operate strongly shapes competitiveness and growth. High burdens or uncertainty can negatively influence investment decisions and affect the way businesses are organised. Often cities' competitiveness in this area will be shaped by national tax, regulation and incentive frameworks, and the challenge will be to make national regimes more simple, straightforward, and attractive.

Political risks

The medium- and long-term competitiveness of cities is often shaped by political and geopolitical changes and risks. These can include unexpected electoral outcomes, entrenchment of political divisions, rises in social inequality, trade disputes, terrorism, failing states, and the integration and disintegration of regional economic blocs. The possibility or perceived possibility of these outcomes can create uncertainty and make risk hard to price. It also can make cities hard to observe objectively from outside because risks can come to influence a city's reputation.

Agglomeration

Size and scale of internal market

The size of the customer and client base in and around cities influences the ability of companies to maximise economies of scale in the way goods and services are produced and distributed. A large market and scale fosters specialisation. Larger markets also usually reduce the per capita costs of infrastructure and offer increasing returns on investment. The potential to sell products to a larger market also provides greater incentives to generate new ideas. For smaller cities, the ability to 'borrow scale' and create critical mass among a group of cities offers a complement to the local market. Competitive cities not only have access to large markets; they also are well placed to supply the right mix of products and services to match the character of supply and demand in their region.

Clustered specialisations

Specialisations are fundamental to competitiveness, whether these are industry clusters, headquarters or institutional operations, niche technologies, business climate, or natural commodities. The depth and quality of business collaboration in specialised clusters is vital for upper-income cities where much of the low-hanging fruit to improve productivity has been exhausted. The range and expertise of local suppliers and the frequency of their interaction affects how new products and techniques are developed. Established clusters also usually reduce barriers to entry for new and up-and-coming firms.

Institutional engagement

Engaging public, private, and civic institutions is an important dimension of sustaining competitiveness for cities. Because urban economic development is a long-term and geographically broad activity, it relies on wide institutional collaboration – with universities, media, and business and community interests. Active, bold, and socially responsible institutions often play a role in maintaining high standards, promoting projects, and reassuring investors and consumers. By looking beyond electoral cycles and political geography, they can also help foster dialogue with different government stakeholders in a metropolitan area and build a shared vision.

Attractiveness to talent

Human capital, liveability, and opportunity

are essential to city competitiveness. Education and skills are major drivers of new ideas, entrepreneurship, innovation, and growth. Cities must prioritise developing the human capital at all income levels that sustains competitiveness. Making cities more liveable by expanding and diversifying educational, cultural, and recreational amenities, including outside the city core, is key to attracting high-calibre international talent. A capable and flexible labour market also helps cities create new types of jobs.⁶

Innovation, technology, and enterprise

The development and implementation of new solutions, products, and technologies is an essential aspect of city competitiveness. Cities must foster innovation ecosystems that match skills to demand, allow a culture of enterprise to flourish, and support companies to enter the marketplace. Research and development capabilities are fundamental, as are 'softer' forms of innovation, and usually rely on strong links among universities, scientific research, companies, and capital. An innovation economy also depends on rapid adoption of new technologies into the daily activities of businesses, as well as well-protected intellectual property. Cities with an advanced innovation system do not just 'sell' innovations; they also generate business profits by adopting new innovations and business models to produce efficiency gains.⁷

Brand, identity and destination

With ever-increasing international competition for investment, cities need to present a distinct identity to investors, residents, students, and institutions. Competitive cities typically have a reputation for high standards and aspirations in the markets that matter to them. Effective branding strategies can also help galvanise socially and economically fragmented cities around a shared purpose.⁸

The Competitiveness of Milan and Turin

The economies of Milan and Turin are among the 30 largest in Europe. The cities are at the bottom of the 'Blue Banana', an arc of development where most of Europe's productive capacity and competitive advantage are located.⁹ This arc is still a feature of the European system of cities, and the cities within it are a major driver of European competitiveness.

Disruption caused by the current cycle of globalisation is requiring European cities to restructure economically in response to changing global markets and to compete in new ways that reflect the changing preferences of capital, companies, and talent in a global system.

Figure 5 shows Milan and Turin's place among other major Italian cities, and among cities globally, in terms of gross domestic product (GDP). The size of Milan's core metropolitan economy ranks safely among the world's top 100, on a par with metropolitan Berlin and Denver, placing it ahead of the capital city, Rome. However, the economy of the Greater Milan region – incorporating most of the Lombardy region and some of Piedmont – is arguably much larger. Turin has Italy's third-largest metropolitan economy, similar in size to those of Birmingham, U.K., and Busan, South Korea.



Milan and Turin within the 'Blue Banana' of competitive European cities.

Source: *The Business of Cities*.

Figure 5: Milan and Turin economies ranked against cities of Italy and the world

	Global rank in population	GDP	Global rank in GDP	Global peers by GDP size
1 Milan	99	\$183 billion	65	Berlin, Denver, Kuwait City
2 Rome	93	\$169 billion	71	Baltimore, Chengdu, Santiago
3 Turin	206	\$83 billion	152	Prague, Birmingham, Busan
4 Naples	142	\$69 billion	185	Izmir, Budapest, Kiev
5 Bologna	437	\$40 billion	262	Seville, Utrecht, Porto
6 Florence	434	\$40 billion	282	

Notes: Ranking is among 650 cities worldwide. Population ranking is based on the following data: Milan, 4.5 million people; Rome, 4.7 million; Naples, 3.6 million; Turin, 2.7 million; and Bologna and Florence, 1.2 million each. GDP is based on purchasing power parity; for each city the figure given is the mid-range of a \$7 bn band, the highest level of accuracy for which public data is available. Source: JLL, *Global 300 Map*, 2017.

Figure 6 illustrates that in terms of productivity, Milan and Turin are in the middle bracket of European cities. Milan has a much higher GDP per capita than Turin, but its global position is well outside the global top 100 and well behind the leaders in Europe's larger nations, such as Munich, London, and Paris. Turin ranks 224th for GDP per capita globally, on a par with Marseille, but clearly ahead of cities like Manchester, Valencia, and Wrocław Europe.

Population change in the two cities

Economic transition and reurbanisation are underway in both cities, as shown by figure 7.

After the challenges of the financial crisis, Milan has now begun to experience *il nuovo rinascimento* (the new renaissance), energised by its innovation economy, successful hosting of the 2015 Expo, a strong bid location for the European Medicines Agency, and its growing population and improving quality of life. The population of the city of Milan has risen by nearly 100,000 since 2008, with most of the increase made up of young people, and the city is now making steady and recognised improvements to infrastructure and the urban fabric.

Turin has also consolidated its population within the city limits at just under 80 per cent of its historic peak.

In both cities suburbanisation has continued throughout the industrial transition, bringing with it new challenges of metropolitan coordination and transport infrastructure deficits.

Figure 6: GDP per capita of Italy's metropolitan areas, compared with the five largest metropolitan areas of the five largest European nations, 2017. *Source: JLL, Global 300 Map, 2017.*

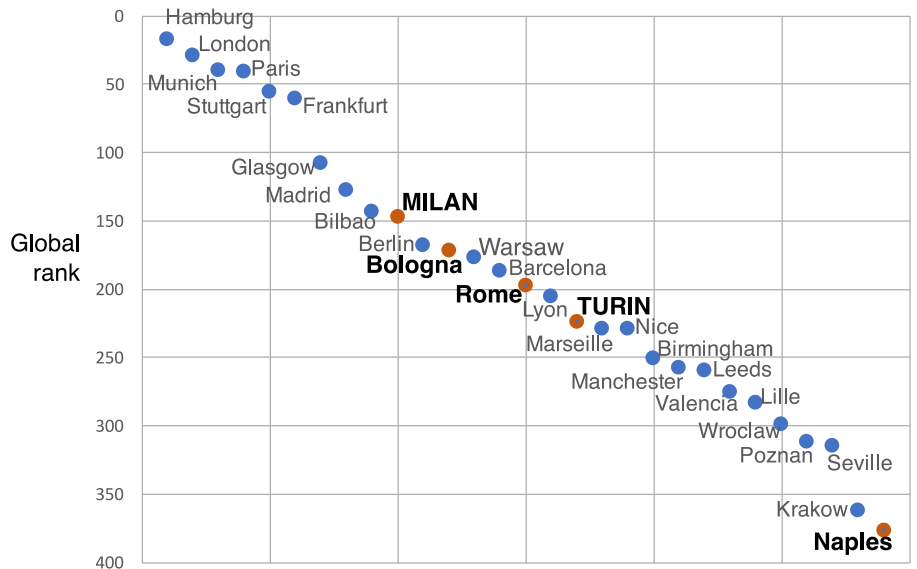
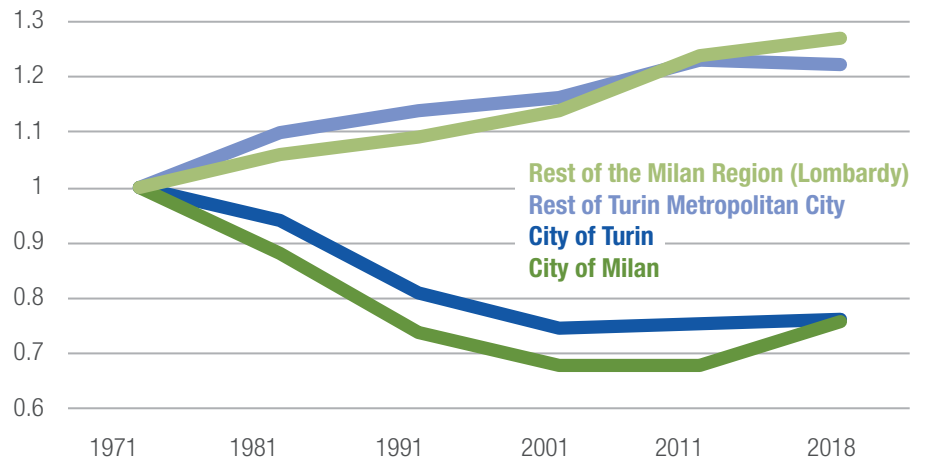


Figure 7: Relative population change of Milan and Turin vs broader metropolitan areas, 1971 to 2017 (1=1971).



Note: The Milan Region and Turin Metropolitan figures do not include the core cities of Milan and Turin. *Source: ISTAT.*

Figure 8: Milan's performance in seven leading indexes

	UN Habitat/ Cass Global Urban Economic Competitive-ness	A.T. Kearney Global Cities Index	IESE Cities in Motion Index	Arcadis Sustainable Cities Index	Mori Global Power City Index	DHL Global Connectedness Index: Globalisation Giants	Mercer Quality of Living Survey
	2017	2017	2017	2017	2016	2016	2017
Number of cities ranked	200	128	181	100	44	113	231
1 Vienna	41	20	15	4	14	40	1
2 Amsterdam	90	22	10	11	7	14	12
3 Berlin	53	13	9	17	8	55	13
4 Frankfurt	22	29	36	6	12	34	7
5 Stockholm	24	39	25	3	16	61	20
6 Madrid	119	14	28	20	27	25	51
7 Barcelona	80	24	35	24	24	21	42
8 Brussels	70	11	40	40	21	70	27
9 Milan	143	43	38	42	32	22	41
10 Rome	120	33	43	22	-	80	57

Note: Overall rank is based on algorithm of relative position across all rankings, using Elo methodology.

Figure 9: Five areas where Milan performs strongly and five areas where it underperforms in indexes since 2016, compared with the rest of the world

Index	Ranking
Euromonitor International City Destinations Ranking	27th of 100
Resonance World's Best City Brands	26th of 100
Arcadis Sustainable Cities Mobility Index	18th of 100
2thinknow Consulting Innovation Cities Global Index	29th of 500
QS Student Cities	33rd of 100
IESE Cities in Motion Index: Governance	79th of 181
Deutsche Bank Mapping the World's Prices 2017: affordability	37th of 47
Brookings Redefining Global Cities: higher education attainment	86th of 123
Nesta, et al.: European Digital City Index	46th of 60
TomTom Traffic Index, global	118th of 189

Milan in the benchmarks

Milan was commonly viewed and rated as the third city in Europe behind London

and Paris in the 1980s, especially for banking, culture and retail.¹⁰ However, over the next 20 years, institutional inertia, political competition, and a lack of strategic thinking about the city's future meant that other cities moved ahead of Milan, according to benchmarks and comparisons with global cities.

Recent benchmarks illustrate that Milan has recorded substantial recent improvements in human capital, visitor economy, connectedness, and shared mobility, but is behind in measures of governance, congestion, educational attainment, and the digital economy (see figure 9).

Figure 10: The different spatial scales of Milan

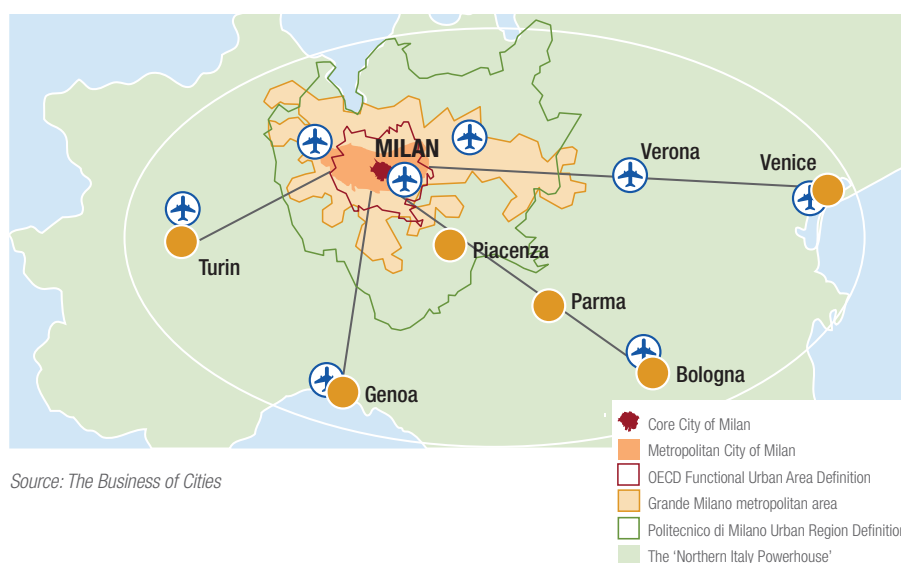
	Population	Size	Number of municipalities	GDP	Cities/regions of similar economic size
Milan core city	1.4 million	182 km ²	1	€61 billion	Grand Lyon, Greater Manchester
Metropolitan city of Milan	3.2 million	1,575 km ²	134	€144 billion	Berlin, Barcelona metropolitan area
OECD functional urban area	4.2 million	2,640 km ²	252	€180 billion	Melbourne, San Diego
Grande Milano region	7.5 million	8,100 km ²	858	€250 billion	San Francisco Bay Area, Greater Sydney
Politecnico di Milano region definition	12.5 million	30,000 km ²	1,500+	€400 billion	Ruhr region
'Northern Italian Powerhouse'	16 million	46,000 km ²	2,000+	€500 billion	Greater London, Paris/Ile de France

One major concern for Milan is that the complexity of its spatial development and governance means there is no agreed-upon international definition of the city or city-region for use when comparing it to others cities and regions. As a result, most international studies analyse Milan as a city of 1.4 million people, omitting the scale, assets, and diversity of its surrounding metropolitan area and wider economic region.

Partly because of these size and measurement discrepancies, and partly because some of Milan's big strengths (e.g., creativity, culture, design, innovation) are not fully captured in comparative studies, Milan's performance is often recorded as being below that of its European peers.

The new public/private benchmarking exercise Osservatorio Milano also highlights the need for Milan to become greener, smarter, and more liveable in the future. To achieve these imperatives, governance will need to be much more coordinated at the regional and metropolitan levels.

The many different definitions of the Milan region.



Milan's competitiveness: assessment

Governance framework

Vision, strategy, and coordination

Recent metropolitan-scale initiatives do not yet translate into a shared vision and strategy for Milan's future. There are successful initiatives, but no coordinated leadership or platform for implementation. The city's multi-tier governance system is complex and there is little agreement on what is the right metropolitan scale for joint strategy. Because the region's economic and spatial footprint continually outgrows the governance framework, Milan suffers from fragmentation of key systems (e.g., transport, housing, economic promotion) and growing economic gaps between core and periphery.¹¹

The absence of local government buy-in or national government support to move forward on a shared metropolitan growth strategy results in competing land uses, slow infrastructure upgrades, and obstacles to cluster development. But Milan's city government has become more purposeful and civil society has become much more proactive in advancing land and development projects that encourage urban restructuring and foster emerging clusters.

“ *Citizen political behaviour in Milan has become less tribal and more pragmatic. Milan is now leading the development of the region with catalytic urban projects.* ”

- Participant at ULI workshop, September 2017

Land use, planning system, and density

The movement of people to the suburbs while jobs return to urban areas has created a complex set of dynamics in the Milan region. The functional economy stretches northward to the Alps and has a polycentric urban form.¹² But in the inner city, a growing number of redevelopment projects are employing high density and promoting more sustainable urban living to serve a growing population.¹³

The variety of projects recently completed or arriving soon (including Porta Nuova, Scali Ferroviari, and Expo 2015 and its urban legacy) promises to showcase Milan's new model of human-scale, bicycle-friendly urbanism and the ability of multiple tiers of government to work with the private sector and anchor institutions to reactivate public land.¹⁴ Several projects are being unlocked by the forthcoming 'Circle Line', which will provide a circular rail connection about 5 kilometres outside the city centre, as well as park land, public housing, and bike trails. Together, the projects should allow Milan to accommodate the next cycle of housing demand, although challenges of



Porta Romana, in the south east of Milan city centre (BrasilNut1/iStock)

affordability and rental options remain. Among the next big tasks for Milan is to rejuvenate the inner suburbs by improving transport connections and ensuring greater diversity of land uses.¹⁵

Infrastructure and services

Milan's transport infrastructure has improved in recent years, thanks to co-investment in new Milan Metro lines, upgrades of existing systems, and new highway links. The city is now well ahead of other Italian cities for urban mobility, and digital infrastructure is also improving.¹⁶ The Metro is now much more effectively linked to the suburban and regional rail network and will provide more efficient connections to key job districts and the airport.¹⁷

The region is comparatively congested and car-dependent, but now benefits from faster inter-city rail links that are making commuting to several strategic locations (including Turin) feasible and boosting capacity for both passenger and freight services.¹⁸ Faster connections to Genoa and Zurich are also set to transform passenger and freight flow and complementary strengths among these cities.¹⁹

Overall, Milan's infrastructure is catching up with that of other leading European cities. In the coming years the city will need to continue the current level of infrastructure investment, including through use of new financial tools and joint ventures.²⁰ Suburb-to-suburb travel and the adoption of smart and secure digital systems that improve transport flows, infrastructure safety, and digital connectivity are among the big competitive priorities identified in the ten-year Sustainable Urban Mobility Plan.

Competitive climate

Costs and business investment

Business costs – labour, energy, and rents – have become more competitive in Milan relative to other European cities in recent years. Business and institutional investors have increased their activity and their confidence has risen in response to the recent introduction of a number of national labour market reforms, technology and R&D incentives, ongoing signs of an economic recovery, low interest rates, and strong liquidity.²¹

International perceptions regarding business costs and business investment in Milan are partly shaped by associations with Italy's weak business brand.²² Although those familiar with doing business in Milan have much more positive perceptions, the city faces a challenge to differentiate itself more clearly from Italy in the international arena.

“ *Milan's burghers and bankers need politicians in Rome to make deeper structural and cultural reforms if Italy's most cosmopolitan city wants to fully open for international business.* ”

- *Financial Times*, 2017 ²³

Tax and regulatory framework

Though, in the past, high national tax and regulatory burdens and insufficient regulatory quality weakened the business and investment climate in Milan, recent reforms to improve digitisation, transparency, and dispute resolution mechanisms are having a positive impact.²⁴ Reduced corporate tax rates and adjustment to personal income and capital gains tax arrangements are aligning Italy more closely with other leading nations, helping Milan, in turn, attract companies, returning former residents, and international talent. Relatively low wages for university graduates, however, remain a major disincentive for younger talent and prospective firms.

Political risks

Milan's political risks are moderate, but relate to Italy's challenges regarding constitutional reforms, short political cycles, high social inequality, the rise of populism, and weaknesses in the banking system. These risks are not of Milan's making, but, as Italy's main centre of business and finance, the city is affected by how well these risks are managed by national and supra-national governments. Milan's challenge here is partly to support good national policy, and partly to demonstrate that its own strong systems of city government, management, and transparency insulate it from national risks and enable it to perform well above Italian norms.



Bosco Verticale, Porta Nuova. (RossHelen/iStock)

Agglomeration

Size and scale of internal market

As the economic capital of a macro-region with a population of 15 million to 20 million, Milan benefits from a very large base of companies, customers, suppliers, and logistics facilities, and borrows scale from surrounding medium-sized cities. Its market size and level of access hold great appeal to multinational companies, while smaller businesses located in industrial districts have a proven ability to learn, absorb economic disruption and innovation, and adapt over the long term.²⁵ But Milan's scale is constrained by the high cost of transport and public services, environmental weaknesses, low internet speeds, and weakly coordinated land use policies.²⁶

Clustered specialisations

The core city has internationally competitive specialisations in finance and consulting, fashion and design, biotechnology, and food innovation. At the wider regional economic level, Milan possesses many mature, specialised, and cross-cutting clusters. The Milan region successfully combines multiple knowledge, research, services, and creative functions, united by entrepreneurial DNA.

Milan's industrial, fashion, and design clusters consist mostly of small, nimble, and well-networked firms. In locations where these companies are concentrated, they are helping the city rediscover and promote its advanced manufacturing identity. Analysts have highlighted the importance of better co-operation between firms and universities, shared R&D facilities, stronger leadership and organisation of sectors, and opportunities to scale up expertise to achieve greater commercial success.

Institutional engagement

Public and private institutions in Milan are engaging more strongly to support the economy and organise in response to new opportunities.²⁷ The Chamber of Commerce is especially proactive at helping internationalise small to medium-sized enterprises (SMEs) and promote technology uptake and entrepreneurship.²⁸ Across the region, however, many initiatives overlap and duplicate each other's effects, and there is no single locus of nongovernmental leadership.

“ If the city of science and knowledge will become another opportunity for growth and work, if the new manages to live with the old, then Milan will once again become the ideal city for those who have some project in mind. Simple and digital, quick and accessible, supportive and inclusive. . . . a different capital. The capital of responsibility that has given itself a role for the country.²⁹ ”

- **Giorgio Napolitano**, Vice Director, Corriere della Sera



A stylised map showing the economic dynamics among Milan and other cities in Lombardy.

Source: MIWorld/Politecnico di Milano.

Attractiveness to talent



Navigli District (Repistu/iStock)

Human capital, liveability, and opportunity

Milan's job base, amenities, climate, and lifestyle consistently attract domestic talent and provide good opportunities for existing residents. The city's reputation for style, its low house prices, and 2013 legislation that facilitates visas and more flexible employee contracts have all increased its appeal to entrepreneurs.³⁰

Compared with European peer cities, Milan's quality of life is compromised by heavy traffic congestion from the outskirts to the centre, air pollution, and unequal access to key public goods such as high-quality education and green space. Urban sprawl and increased commute distances erode Milan's liveability advantages.

High levels of out-migration of young and well-educated Milanese residents is an ongoing concern.³¹ Government tax exemptions for highly skilled workers and researchers have begun to attract more Italians working abroad to return or stay in the city, although the wage gap versus what can be earned in other European cities is a deterrent for early-career college graduates.³²

Innovation, technology, and enterprise

The Milan region inherits a distinctive culture of production, innovation, and entrepreneurship, which now has to be geared to the new innovation economy. Positive signs include the attraction of leading global IT firms, new urban locations for innovation, and an improved tax regime for startups.

The challenge for Milan's innovation ecosystem is for Italian venture capital firms to become active and for avenues of collaboration to deepen between co-working spaces and startups, and between universities and SMEs. Analysts have observed that as the startup culture grows, public institutions will need a clearer grasp of what makes a startup successful and competitive and how to be as accommodating as possible to international would-be innovators.

Brand, identity, and destination

Milan inherits a powerful global reputation for fashion, design, and retail, reinforced by famous global ambassadors. However, the city's international reputation has been partly held back by Italy's less favourable national business brand and perceived national risks.

Milan has begun to re-establish its profile as a highly attractive city with a large presence of multinational firms surrounded by a dynamic, distinctive, and productive region. Despite these improvements, the overlap and duplication of messages mean that the world has not yet learnt a compelling narrative about what exactly Milan stands for or where it is going. As a result, the city's business brand remains below its potential, and Milan is still perceived by some audiences as more a city of warehouses and production than one of creativity and openness.

Turin in the benchmarks

In 2018, Turin's economic size and per capita GDP place it in a peer group of third-tier European cities in transition from an industrial economy to an innovation economy. This group includes Rotterdam, Glasgow, Lyon, and Bilbao. Across all indexes produced worldwide over the past five years, Turin's performance relative to its peers has declined. The city's aggregate ranking performance has fallen behind Bilbao and Malmö, while other cities are making improvements and instituting reforms more rapidly (e.g., Lyon, Stuttgart).³³

A closer look at recent indexes reveals that since 2016, Turin has shown promise in urban planning, transport, and policies for social integration, but it performs less well in indexes assessing human capital, jobs growth, and digitisation (see figure 11).

Figure 11: Five areas where Turin outperforms and underperforms in indexes since 2016, compared with the rest of the world

Index	Ranking
IESE Cities in Motion Index: Urban Planning	12th of 181
Council of Europe Intercultural Cities Index	5th of 77
IESE Cities in Motion Index: Mobility and Transportation	32nd of 181
TomTom Traffic Index, Europe	9th of 43
SportCal Global Sports Cities Index	83rd of 621
IESE Cities in Motion Index: human capital	109th of 81
Brookings Global Metro Monitor: GDP and jobs growth since 2000	282nd of 300
Numbeo Air Pollution Index	160th of 201
European Digital City Index (Nesta et al.)	55th of 60
JLL Global 300: Global Attraction Index	193th of 300

Turin's competitiveness: assessment

Governance framework

Vision, strategy, and coordination

After 20 years of inspirational and collaborative leadership, and two cycles of strategic planning with strong citizen and civic consensus to drive the city's turnaround, Turin's strategic agenda on competitiveness has recently receded. Emphasis on long-term competitiveness, metropolitan coordination, and implementation platforms have all diminished as other priorities have come to the fore. The new Metropolitan City of Turin was established in 2015, replacing the province of Turin, but has few tools and responsibilities.

The long downturn and leadership vacuum have resulted in a loss of confidence about Turin's future and little appetite for a big new strategic prospectus. Instead, observers note the need for more tactical leadership to align short-term projects with a longer-term view.

Land use, planning system, and density

After 20 years of steady reurbanisation, Turin is an upper/medium-density city with many desirable districts helping it carve a new polycentrism. Former industrial areas are now home to some of Turin's most prestigious and successful firms. But large areas of disused brownfield land still remain to be reactivated.

Redevelopment of the historic Barriera di Milano district and planned development of the Molinette health district demonstrate the city's strong focus on human scale, authenticity, and attractiveness.³⁴ Public and private anchor institutions play a decisive role in the conversion of several other sites. It is currently unclear whether the new priorities to retain production facilities and upgrade peripheral areas will foster the placemaking and mixed-use character of Turin's recent development process.³⁵

“ We need a new cultural mindset that substitutes the narrative of Torino with that of Gran Torino. . . . We need projects, initiatives, and actors that increase the awareness of Gran Torino among citizens. The metropolitan area is still an obscure entity without any operative tools or structures, [which is] a real obstacle in the game among European cities. ”

- **Valentino Castellani**, former mayor of Turin

Infrastructure and services

Turin's transport system has become much more competitive over the past 15 years, and further improvements are coming on line. Investment in the Turin Metro system, suburban and tramway networks, and inter-city links has been important in shifting more people to public transport.³⁶ These investments have also helped improve east–west connections that link the city's main employment centres, key railway stations, hospitals, and knowledge hubs.³⁷

While transport has become a competitive asset, among the next priorities for the city are upgrading digital infrastructure, improving the speed of rail connection to Malpensa, and improving the natural environment along the Milan–Turin corridor, which is now a strategic axis of growth.



Turin City Centre (RossHelen/iStock)

Competitive climate

Costs and business investment

Costs to business and the conditions to raise the rate of business investment are improving in Turin, thanks to recent national reforms that have eased rigidity in the labour market.³⁸ Business options in the office market are not yet highly competitive because much of Turin's office stock is not sufficiently flexible and efficient. A fragmented office cluster and limited availability of grade A product hurt business efficiency and opportunities for cost sharing.³⁹

Tax and regulatory framework

Italy's business environment means that Turin tends to lag behind the Organisation for Economic Co-operation and Development (OECD) average for tax and regulatory competitiveness. The city excels among Italian cities for enforcing contracts, but underperforms with regards to starting a business and registering property.⁴⁰ Recent national reforms to

taxes and incentives have started to have a positive impact on business at the national level, but it remains to be seen whether these reforms will affect company activity in Turin.

Political risks

Turin's overall level of political risk is moderate. The main risks relate to the city's debt burden, as well as opposition to immigration and the national rise of Euroscepticism. Immigration offers important benefits to Turin's economy, but austerity and high unemployment are contributing to multi-ethnic frictions which may affect the city's attractiveness for investors and talent.⁴¹ Rising opposition to the European Union and to established political institutions may add to the external perception of risk. Turin's high public debt per capita has also become a burden on the city's budget, placing limitations on future borrowing and raising the risk of instability if future shocks occur.

Agglomeration

Size and scale of internal market

Turin has a diverse metropolitan consumer base to serve and very good access to much of the western European market. These benefits have allowed the city to retain many internationally recognised companies. But overall, its scale is constrained by a relative lack of large corporate customers and a relatively low degree of specialisation in high-productivity sectors.⁴²

The city has the potential to 'borrow' scale through deeper integration with Milan. The sharing or aggregation of assets, improved corridor development, and additional inter-regional and Alpine links are some of the catalysts for such integration.⁴³ So far, Turin's advantages of low costs and family friendliness have not translated into increased attraction or specialisation relative to Milan. But partnerships and projects among leading institutions could change this.

Clustered specialisations

Turin has successfully diversified its industrial economy to include modern specialisations in advanced automotive technology, information and communications technology, aerospace, design, and biotechnology. Its clusters are underpinned by capable larger companies, a strong research system, and good use of public initiatives and incentives. The city is now well placed to become a centre for advanced urban manufacturing, smart-city innovation, and food innovation. This potential requires investment and decision making to ensure that these strengths achieve critical mass and are adequately promoted.

Institutional engagement

Turin's academic, civic, philanthropic, and business institutions are very active in supporting the business ecosystem. They encourage companies to export and internationalise, and make old industrial spaces fit for new economic purposes. These institutions are also important in supporting knowledge transfer between companies and universities, and across industries.⁴⁴ In periods when political momentum for the competitiveness agenda is absent, nongovernmental institutions are vital in filling the void.

“ We need real co-operation with Milan. Collaboration is the new competition. A new alliance is needed. The integration of the Politecnico would create a truly world-class university and send an important message. ”

- Participant in ULI workshop, September 2017



The re-purposed Lingotto factory, historic home of Fiat, in Turin.
(Forgemind ArchiMedia/flickr)

Attractiveness to talent

Human capital, liveability, and opportunity

Turin has become a much more attractive and appealing city in which to live, with excellent cultural facilities, reasonably priced housing, and a reputation for safety and for upholding the rule of law. It also has impressive regional assets and performs well in studies of resident satisfaction. But this has not translated into a widely shared perception that Turin is a city of special opportunity and appeal for talent. Many international students who choose to study at Turin's universities and training institutions leave after completing their qualifications.

The failure to convert this potential into economic growth is primarily attributable to a stagnant labour market, limited social mobility, barriers to starting a business in the tech economy, and national immigration policies that do little to promote foreign entrepreneurship. High levels of air pollution and a relatively small rental market are also deterrents.⁴⁵

“Immigration is a key past, current, and future feature of Torino identity. Migrant communities and ambitious individuals could be a positive ingredient for the city.”

- Prof Matteo Robiglio, Politecnico di Torino

“Turin has huge geographic advantages – in terms of its hinterland, its mountains, wine, the sea, its family-friendliness. It is one of the best locations in Europe. This is not adequately exploited and marketed.”

- Participant in ULI workshop, September 2017

Innovation, technology, and enterprise

Invention and innovation are in Turin's DNA. The region hosts an impressive number of labs and R&D centres, a strong network of incubators, and a promising local ecosystem for social innovation focused on education, health, aging, and inclusion. For nearly a decade, the city has been developing a smart-city platform to improve urban infrastructure, services, and energy efficiency through technology innovation, with the agency Torino Wireless as the key partner.

Turin's ability to become a leading city for innovation in Europe is held back by the limited access of SMEs to capital, the absence of a defined centre of gravity for the start-up scene, and slow access to public officials for entrepreneurs or developers seeking to create innovative space. So, despite recent progress, its innovation economy lags behind that of its European peers in both size and scale.

Brand, identity, and destination

Turin's identity as a forward-thinking, confident, and historic post-industrial city reached a high-water mark of coherence and clarity before the global financial crisis, when it hosted the Winter Olympics in 2006. But the long economic slowdown and related social challenges appear to have eroded the city's self-confidence and sense of direction. This, in turn, has weakened the city's identity in the global marketplace.

As Turin's culture of governance partnership has faded, there is uncertainty and fragmentation about how its different brands – gastronomy, art, culture, tourism, innovation, and smart city – are communicated. Questions are now being asked about what the city should ultimately become known for – and how its DNA of design, architecture, food, industrial innovation, and sport can align with a positive vision for Turin's role in the future world of cities.



University of Turin. (ClaraNila, iStock)

Assessment and Recommendations

Milan

Milan's competitiveness and confidence have clearly recovered over the past five years. Following a period of inertia during which other European cities moved ahead of it, Milan has benefited from improved city government, the rapid evolution of its knowledge and innovation economies, and a succession of public/private projects that are now bearing fruit. The city is enjoying a large influx of talent and a resurgent visitor economy, and is rebuilding and promoting its DNA of design, knowledge, innovation, and culture, all underpinned by the scale and dynamism of its much wider region, Grande Milano, with a population of 8 million.

Competitive advantages

Milan is commonly compared with and measured against other urban economies at the city level (1.3 million population), but its true scale and dynamism fundamentally rests on its much wider region.

- **A highly attractive inner city** with established international strengths in finance, consulting, and media, as well as an emerging advanced, high-tech manufacturing identity grounded in high-profile districts and neighbourhoods. The urban core offers many intangible lifestyle benefits to talent in different age brackets, including gastronomy, culture, natural surroundings, family-friendly housing and amenities, and connectivity to other centres.
- The support of a **large diversified and innovative region** (Grande Milano) that hosts competitive clusters in agricultural technology, agrifood, aerospace, clean technology, energy, life sciences, medical instruments, and smart technologies – all united by entrepreneurial DNA. This wider region provides both the scale and high quality, in terms of production, enterprise, higher education, and airports, for Milan to become a European and global powerhouse.
- A **civil society that is very active**, and civic and business leaders that have the proven ability to create public/private teams and mount attractive projects offering strategic and high-value opportunities.
- **Direct and indirect costs of doing business** that have fallen relative to those of other European cities experiencing inflation. The combined effect of national economic recovery, labour market reforms, technology and R&D incentives, reduced taxes, low interest rates, strong liquidity, and improved dispute resolution mechanisms is helping Milan attract greater numbers of companies, investors, returning former residents, and international talent, although challenges remain.⁴⁶

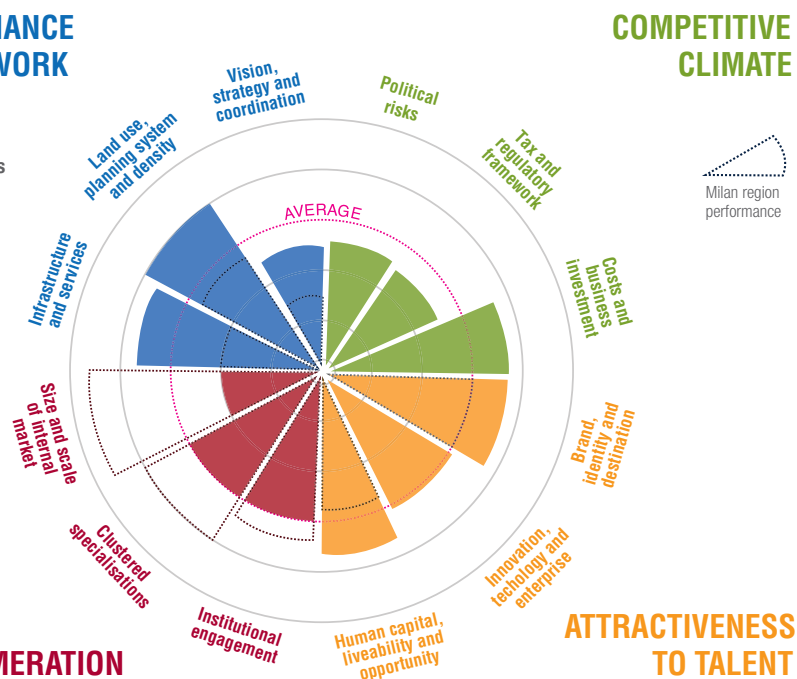
Figure 12: Illustrative evaluation of Milan according to 12 competitiveness criteria

Note: The wider Milan region is represented by the dotted lines.

GOVERNANCE FRAMEWORK

Milan vs Peers

Amsterdam
Berlin
Stockholm
Madrid
Barcelona
Vienna
Frankfurt
Brussels
Rome



Competitive threats

- **A fragmented governance system** with many municipalities that makes it hard to mount visionary strategic planning. The absence of local government buy-in, national government support, or an agreed-upon idea of what the Milan metropolitan area really is produces costs that hurt the city's competitiveness, including competing land uses, slow pace of change, limited scale of initiative, and unequal outcomes.
- Perceptions that the **quality of life lags behind** that of its peers in northern Europe because of real and perceived disadvantages in terms of congestion, pollution and access from the outskirts to the centre.
- **Dis-economies of scale** including high costs of transport and public services, fragmented clusters, weak co-operation between firms and universities, and overlapping and duplicative economic initiatives.
- Mixed international **perceptions about the costs and risks of doing business**, which are shaped and informed by Italy's weak business brand.⁴⁷ Milan's business climate relies on a framework that requires constitutional reform, as well as solutions to banking system weaknesses and political short-termism. Reforms and solutions to address these issues rely on action by national and supra-national governments.

Milan's competitive performance varies substantially according to whether the entire region or just the city is being measured. Illustrating this divergence, figure 12 evaluates the city of Milan and the Milan region against European peer cities. Whereas the city of Milan performs strongly in terms of infrastructure, development, brand, and destination, it is at the regional scale that the agglomeration effects become much more visible. However, the region's deficits in terms of governance, quality of life, and competitive climate require a series of combined efforts to address.

Recommendations

- To aid and encourage its growing recovery and resurgence, Milan needs more effectively and more powerfully to **tell its story of transformation** from a centre of industry to a richly diverse post-industrial region. It should promote how it plans to become the city it wants to be in 20 years. As part of the next cycle of positioning, Milan should demonstrate how it aligns with and contributes to future thinking on smart cities, the sharing economy, and sustainable mobility, as well as how this helps the city improve urban productivity and its ability to foster entrepreneurship.
- Milan should pursue the **northern Italy and Alpine region** as an increasingly integrated and competitive economic unit. Given the complementary strengths of Milan and Turin, plus improving regional connectivity, the region's largest cities should expand their joint positioning and

knowledge sharing while retaining their strong individual identities. This should also encourage an Alpine 'system of cities' approach that can ultimately spread benefits to the rest of the country.

- Milan's business leaders should prioritise **'softer' governance solutions** – public/private partnerships, catalytic projects, brand management, and strategic planning – that build alliances across borders and set examples for government. The region could benefit from a single locus of business and civic leadership that promotes a clear and consistent message about how best to manage and optimise agglomeration. Both Barcelona Global, a business and civic leadership platform that promotes talent attraction and economic development, and Stockholm Business Region, a multi-municipal partnership for investment, can provide inspiration for Milan. Real estate companies, universities, airports, and trading firms can all take a lead in identifying priorities for collaboration.
- Milan should **differentiate its business climate** and level of transparency from Italy's less favourable business brand. As well as supporting good national policy, Milan should demonstrate that its own strong systems of city government, management, and transparency insulate it from perceived national risks. This will require a professional information and promotional effort.

Turin

Turin has made remarkable progress since its most acute period of industrial crisis, but over the past ten years its momentum has stalled. The city retains its niche capabilities in design, engineering, and advanced manufacturing, but it has struggled to protect its jobs base and create the conditions to spark its emerging startup scene.

Turin's future competitiveness relies on the emergence of leadership that can galvanise others and bring into focus a powerful 20- to 30-year strategic vision for the city. This vision should be actively supported by business and civic leaders who can work with city leaders through different political cycles.

Competitive advantages

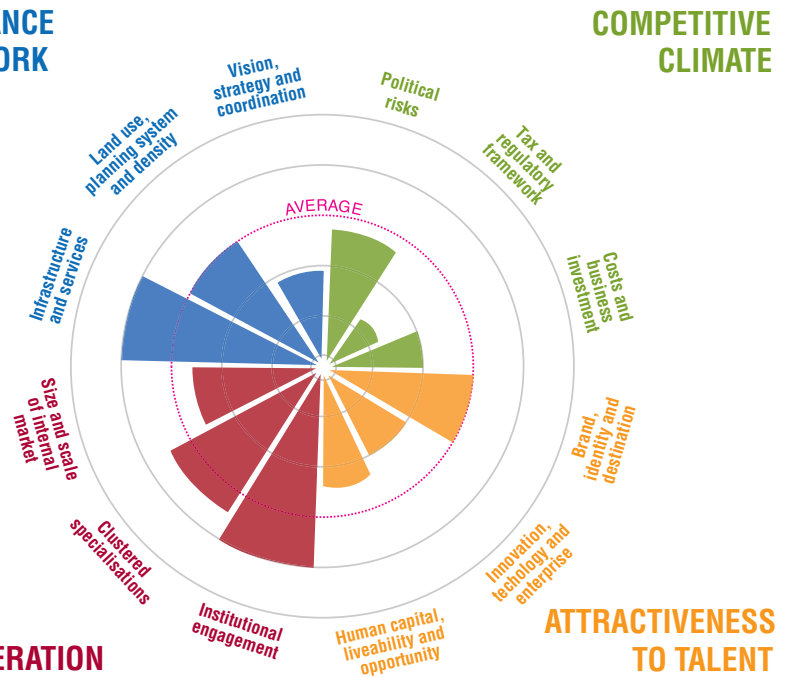
- **A high quality of place and inherited DNA of openness and innovation.** Recent investment in arts, culture, public squares, infrastructure, and street life have made the city a more attractive, appealing, and affordable location for families and talent. The city's capabilities in design, engineering, and automotive and social innovation can underpin the next cycle of innovation.
- **A newly defined metropolitan territory** that combines Turin's rural and urban assets and is well served by existing regional infrastructure. The city also has a recent history of strong collaborative city leadership and highly engaged academic and civic institutions committed to improving the business ecosystem.
- Large **reserves of affordable industrial space** that are well located, well connected, reusable, and potentially very attractive to creative and innovative activities.

Figure 13: Illustrative evaluation of Turin according to 12 competitiveness criteria

GOVERNANCE FRAMEWORK

Turin vs Peers

Rotterdam
Glasgow
Stuttgart
Lyon
Lille
Liverpool
Bilbao
Malmö
Newcastle



AGGLOMERATION

- **A diverse metropolitan market,** specialisations with very good access to the central European market, and the potential to 'borrow' scale from Milan and the rest of the region through aggregation of assets, improved corridor development, and additional interregional and Alpine links.

Competitive threats

- **Small size and lack of global reach,** which mean a lack of large corporate customers: in challenging times, firms consolidate their activity elsewhere. Ongoing improvements to regional connectivity will be required in order for Turin to derive the benefits of borrowed scale and be positioned as complementary with neighbours such as Milan.

- **A receding strategic agenda regarding competitiveness** and the diminished role of cross-party delivery agencies. The new metropolitan structure has limited tools and responsibilities, and advocacy for shared metropolitan solutions is fragmented and uncertain.

- **Reduced appeal to local and overseas talent** because of a weak labour market, limited social mobility and integration, and high barriers to business startups. The slow progress in improving liveability through smarter multimodal systems, bike sharing, and sustainable energy could lead to Turin falling behind other cities.

- **A high tax and regulatory burden** relative to other high-innovation cities in Europe, which is a deterrent to a start-up culture and talent attraction. Also, some office stock is outdated and not commercially attractive for the local market.

Recommendations

- Turin needs **civic and business leadership to create a new positive story** about the city and its future that aligns with the big changes taking place globally (e.g., exponential technologies, the rise of Asia, demographic shifts, social networks, the circular economy, and the future of work). A new narrative will help restore private sector confidence and build a broader and more inclusive culture of leadership in civil society. It can also train attention on the strategic initiatives that can gain political backing in the short term. In these respects, Turin can learn from the impetus given to cities by organisations such as the public/private promotional agency Berlin Partner, as well as Verband Stuttgart, a regional alliance and assembly of 179 municipalities.

Turin also needs to build on its infrastructure advantage and proceed with sustainable infrastructure initiatives that can simultaneously foster new enterprise and innovation. These include smarter multimodal systems, more ambitious trials with electric cars, bike sharing, and smart district heating.

- **A clearer offer to entrepreneurs and growth firms**, combined with a value proposition for venture capital, is a necessary first step for Turin to retain more of its talent. The city would then be well placed to become a leader and innovator in automated vehicles, battery storage, integrated transport technology, and IT systems. Given Turin's potential vulnerability to technology change, a programme of city-led innovation, increased investment in technology, and measures to attract and retain creative workers is imperative in order for the city to face the future with confidence and know-how.

Working towards reinventing the city as enjoyable and well serviced is likely to be a key factor in attracting new residents. Further improvements in the quality of life are required and need to align with the social priorities of the current city administration.

- Turin may benefit from **smarter co-operation with Milan** with a competitive mindset that would allow it to play a clearer set of complementary roles. The creation of shared capability and joint projects involving institutions across the region (e.g., the Politecnico, Malpensa Airport, large firms) may offer one way forward, drawing inspiration from Malmö's relationship with Copenhagen and Rotterdam's synergies with Amsterdam.
- Turin should build on the **promise of its social innovation ecosystem to address local challenges** (e.g., youth employment, inclusion, health, education) and demonstrate a model of competitiveness that it is able to reach out to all its residents and expand access to opportunity across the whole income and skills spectrum.

The promise of regional collaboration: Three international examples

Across the globe, cities are recognising the benefits of working with their neighbours.

Those benefits include the following:

- avoiding duplication and reducing wasteful local competition;
- large numbers of people and businesses operating in multiple cities, drawing on complementary assets and achieving combined scale in terms of housing market, knowledge capabilities and visitor offer.
- achieving the scale and productivity required to compete with larger places;
- clarifying the respective advantages of different places;
- aligning decisions about the locations of housing and population growth with wider growth planning and infrastructure investment; and
- improving their visibility and level of recognition in the global marketplace.

Global examples of collaborations between cities include San Diego and Tijuana, Johannesburg and Pretoria, Toronto and Waterloo, the UK's Northern Powerhouse, and the four cities that comprise the Holland Metropole. In this section we briefly explore three multi-city regions that are seeing the benefits of such co-operation: Malmö and Copenhagen; Brisbane, the Gold Coast, and the Sunshine Coast, Australia; and Dallas and Fort Worth, Texas, in the United States.

Malmö and Copenhagen

Malmö and Copenhagen have pursued an infrastructure-led approach to integration over the past 20 years. The Øresund Bridge and tunnel connecting the two cities and the region's main airport by road and rail – all within a 40-minute trip – became a catalyst for soft collaboration on economic development.

The region formed the Medicon Valley Alliance – half public, half private – of 300 members to promote its international visibility and networks in life sciences.⁴⁸ This was one of several bottom-up economic initiatives that have been more effective than efforts to create a new name brand for the region (e.g., Øresund, Greater Copenhagen).

The initial infrastructure investment to connect the cities was supported by land use assembly and management to activate some of the main rail stops in both cities (Ørestad and Hyllie) as new hubs. Municipal land use planning became more focused on incorporating sustainability and compact growth around those stations.

The rail connection initially was used by people living in Malmö to reach jobs in the larger city of Copenhagen. Within a decade, however, Malmö reemerged as the innovation district of the region. Business, visitors and other customers became more interested because Malmö offered the connectivity, strategically located land, attractive costs, improved placemaking, and environment more conducive to parts of the creative and innovation economy. The region's collaboration and integration have been recognised as helping both cities retain multinational firms because of their enhanced access to labour.

Brisbane, the Gold Coast, and the Sunshine Coast

The Australian coastal city of Brisbane has historically grown separately from its wider surroundings, even though the area is home to large and rapidly growing second regions such as the Gold Coast (population 600,000) and the Sunshine Coast (population 300,000). However, in recent years the region has started to collaborate as 'South East Queensland' in order to protect its amenity and lifestyle advantages and prevent commuter gridlock. The local governments for the first time have together developed a long-term (50 years) vision, underpinned by a 25-year land use planning framework that emphasises densification in the key cities as the region grows towards 5 million people.

The collaboration is allowing Brisbane and its regional cities to

- position themselves as a "smart region" and a model of "climate-resilient living";
- advocate more effectively for investment from the federal government, securing a 'City Deal' for infrastructure;
- establish clear boundaries between the built and natural environments and start properly protecting biodiversity and green space; and
- engage their residents with a more optimistic narrative about the future.

Dallas and Fort Worth, Texas

Located nearly 60 kilometres apart, Dallas and Fort Worth used to have an antagonistic relationship. But for 15 years the two cities have developed a much more integrated approach, catalysed by specific projects. The 7 million-population region spans 13 counties and more than 60 towns and small cities, but the growth of the airport in the centre of the region helped galvanise regional collaboration.

Though the informal name 'Metroplex' for the region is widely used by the public, both cities maintain their unique identities and pursue separate economic strategies: Dallas hosts corporate headquarters, professional services, finance, and insurance, whereas Fort Worth specialises in logistics, medicine, aerospace, and transport innovation.

The Dallas Regional Chamber, which spans the two cities, was established in 2008, and has used the growth of the regional airport to attract more headquarters and middle-market companies, as well as promote the region for its pro-growth business climate and sustainable infrastructure. 170 of its firms put money into the Tomorrow Fund for small, high-priority projects. The chamber has played an important role in aligning both cities in an effort to attract millennial talent.

The region also has the North Central Texas Council of Governments, a planning body that uses all of its funding authority to pool tolling, motorway funds, local transport revenues, and national funds to develop regional solutions to common problems based on rigorous evidence. It blends its funds to engage in public/private partnerships that address air quality concerns and create mixed-use locations.⁴⁹ This is important in managing growth: in 2016, Dallas-Fort Worth became the fastest-growing region in the United States and overtook Houston to become the tenth-largest metro economy in the world.

Collaboration between cities of this kind takes a long time to fully develop, usually decades, and can involve stops and starts. It is common in the first cycle of regional partnership for the larger city to benefit from corporate consolidation. Then in the next cycle, innovation strongly emerges in the second and third cities because it is crowded out in the biggest city. The smaller cities attract more young talent looking for affordable homes, and a variety of specialisations tend to take off.

Few regional collaborations take off because of strong leadership from higher tiers of government or because a shared governance apparatus is created. Instead, they succeed by finding the points of influence, adopting a clear communications strategy, and identifying champions for collaboration. Later, a mechanism to lead on harder questions of land use, specialisation, and population management is developed.

Conclusion

Milan and Turin are well placed to develop their role in the European system of cities. To make the most of their opportunity, Milan and Turin should rely on their leaders in the civic and private sectors – including universities, research centres, airports, exhibition centres, landowners and developers, and other leaders and institutions – to identify catalysts, assemble projects, build alliances, and create momentum. At the same time, both cities would benefit from exploring greater inter-city collaboration and complementary approaches, including defining their sectoral strengths, mapping the flows of workers, firms and innovation, and managing the natural and developed space between the two cities. A possible joint bid for the 2026 Winter Olympics may also prompt deeper collaboration. This would make the whole region a more attractive prospect for international investment.

References

- ¹ Caldarera, M. (2017). 'FDI: Italy has successfully moved up three spots in 2017.' Available at www.exportiamo.it/aree-tematiche/13363/fdi-italy-has-successfully-moved-up-three-spots-in-2017/; Savills (2016). 'Cross border investment dominates Italian real estate activity in H1 as total volume tops €3.4bn'. Available at: www.savills.co.uk/_news/article/110559/206131-07/2016/cross-border-investment-dominates-italian-real-estate-activity-in-h1-as-total-volume-tops--3.4bn.
- ² Schwab, K. (2016) (ed.). *The Global Competitiveness Report 2016–2017*. World Economic Forum: Geneva.
- ³ Clark, G. & Moonen, T. (2015). *The Density Dividend: solutions for growing and shrinking cities*. Urban Land Institute: London.
- ⁴ World Bank (2015). *Competitive Cities for Jobs and Growth: What, who and how*. World Bank: Washington, D.C.; World Economic Forum (2014). *The Competitiveness of Cities*. World Economic Forum: Geneva; Clark, G., Moonen, T. & Couturier, J. (2015). *Globalisation and Competition: The New World of Cities*. JLL: London.
- ⁵ World Bank (2015). *Competitive Cities for Jobs and Growth*; World Economic Forum (2014). *The Competitiveness of Cities*.
- ⁶ Florida, R. and Mellander, C. (2015). 'Talent, Cities and Competitiveness'. In D. Aubretsch et al. (eds). *The Oxford Handbook of Competitiveness*. Oxford University Press: Oxford. 34-53; World Bank (2015). *Competitive Cities for Jobs and Growth*; World Economic Forum (2014). *The Competitiveness of Cities*.
- ⁷ World Bank (2015). *Competitive Cities for Jobs and Growth*; World Economic Forum (2014). *The Competitiveness of Cities*.
- ⁸ Martin, R. & Sunley, P. (2011) 'Regional competitiveness: clusters or dynamic comparative advantage?' in R. Huggins and H. Izushi (eds.). *Competition and Competitive Advantage: The Ideas of Michael Porter*, Oxford University Press: Oxford. 211-217; World Bank (2015) *Competitive Cities for Jobs and Growth*; World Economic Forum (2014). *The Competitiveness of Cities*.
- ⁹ Jan-Hospers, G. (2004). *Regional Economic Change in Europe: A Neo-Schumpeterian Vision*. Lit Verlag: Münster.
- ¹⁰ Bank Marketing Association (1984). *Bank Marketing*. Volume 16. p.27; Cushman & Wakefield (1990). 'European Cities Monitor'. Cushman & Wakefield: London; Middle East Economic Digest (1984). Volume 28, p.28.
- ¹¹ Del Fabbro, M. (2017). 'Lessons from Milan's emerging metropolitan debate.' Available at <http://citiscopes.org/commentary/2017/06/lessons-milans-emerging-metropolitan-debate>.
- ¹² Pucci, P. & Colleoni, M. (eds.) (2016). *Understanding Mobilities for Designing Contemporary Cities*. Springer: Basel.
- ¹³ Manfredini, F. & Curci, F. (2015). 'Processes of urban regionalization in Italy: a focus on mobility practices explained through mobile phone data in the Milan urban region.' Presentation, 27th May 2015. Available at https://ec.europa.eu/jrc/sites/jrcsh/files/manfredini_urbanisation_workshop_27may2015.pdf.
- ¹⁴ Stevens, P. (2017). 'MAD architects presents scali milano plans to transform milan's disused railyards.' Available at www.designboom.com/architecture/mad-architects-scali-milano-masterplan-historical-future-milan-design-week-04-10-2017/.
- ¹⁵ TeMA, Milan Chamber of Commerce (2017). *Milano Building the Future 2017*. TeMA: Milan. Available at www.temamilano.it/files/great_milano_web.pdf.
- ¹⁶ Eltis (2017). 'Milan 'most eco-mobile' city in Italy.' Available at www.eltis.org/discover/news/milan-most-eco-mobile-city-italy.
- ¹⁷ Briginshaw, D. (2015). 'Milan completes first of two automatic metro lines.' Available at www.railjournal.com/index.php/metros/milan-completes-first-of-two-automatic-metro-lines.html.
- ¹⁸ Global Rail News (2016). 'Treviglio-Brescia high-speed line opens'. Available at www.globalrailnews.com/2016/12/13/treviglio-brescia-high-speed-line-opens/.
- ¹⁹ Railway-technology.com (n.d.). 'Genoa-Milan High-Speed Railway Line (Terzo Valico)'. Available at <https://www.railway-technology.com/projects/genoa-milan-high-speed-railway-line-terzo-valico/>; SBB (2016). *The new Gotthard Tunnel – Switzerland through and through*. SBB AG: Bern. Available at https://company.sbb.ch/content/dam/sbb/de/pdf/sbb-konzern/medien/hintergrund-dossier/Gotthard/Flyer_PONS_en_2016.pdf.
- ²⁰ Padania Classics (n.d.). 'The Mother of all Motorways.' Available at www.padaniaclassics.com/en/the-mother-of-all-motorways/#.
- ²¹ Caldarera, M. (2017). 'FDI: Italy has successfully moved up three spots in 2017.'; Savills (2016). 'Cross border investment dominates Italian real estate activity.
- ²² Schwab, K. (2016) (ed.). *The Global Competitiveness Report 2016–2017*.
- ²³ Sanderson, R. (2017). 'Milan back in vogue as Italy's financial capital.' Available at <https://www.ft.com/content/cfb822ea-9307-11e7-a9e6-11d2f0ebb7f0>.
- ²⁴ European Commission (2016). 'Europe 2020.' Available at: http://ec.europa.eu/europe2020/pdf/2016/ags2016_challenges_italy_en.pdf.
- ²⁵ Invest in Milan (n.d.). 'Home page.' Available at www.investinmilan.it/.
- ²⁶ Leal Trujillo, J. & Parilla, J. (2016). 'Redefining Global Cities.' Available at www.brookings.edu/research/redefining-global-cities/.

- ²⁷ Sgaragli, F. & Montanari, F. (2017). *Accelerating Milan's local ecosystem for social innovation*. Milan White Paper on Social Innovation. Fondazione Giacomo Brodolini: Milan. Available at www.lavoroformazioneincomune.it/wp-content/uploads/2017/04/Milan-White-Paper-2017-WEB.pdf; Weiss, M. (2017). 'Bocconi, Camera di Commercio e Comune: Milano accelera sull'innovazione.' Available at www.lastampa.it/2017/03/06/edizioni/milano/bocconi-camera-di-commercio-e-comune-milano-accelera-sullinnovazione-n4SnL9J0un0rQzD5lKpN/pagina.html.
- ²⁸ Promos, Milan Chamber of Commerce (n.d.). 'Sviluppo commerciale'. Available at www.promos-milano.it/I-Nostri-Servizi/Sviluppo-Commerciale/?In=625.
- ²⁹ Assolombarda (2017). *Osservatorio Milano 2017*. Comune di Milano: Milan. Available at <https://osservatoriomilanoscoreboard.it/assets/download/OsservatorioMilano2017.pdf>.
- ³⁰ Roberts, H. (2016). 'Milan, Italy's most business-focused city, looks to rival London.' Available at www.ft.com/content/521a2d60-a2b2-11e6-aa83-bcb-58d1d2193.
- ³¹ Edwards, C. (2016). 'Brain drain: More Italians than ever are moving abroad.' Available at www.thelocal.it/20161006/over-100000-italians-moved-abroad-in-2015.
- ³² Cox, R. (2017). 'Cox: Milan is dark horse in post-Brexit bank race.' Available at <http://uk.reuters.com/article/us-italy-banks-breakingviews-idUKKBN19D10Q>
- ³³ *Based on a database sample of 300 indices, calculated using a CODOGOTM algorithm based on the common ELO ratings system.
- ³⁴ URBACT (2010). 'Building Healthy and Sustainable Communities.' Analytical Case Study. Available at: http://urbact.eu/sites/default/files/import/Projects/Building_Healthy_Communities__BHC_/outputs_media/CaseStudy-Torino_Final.pdf.
- ³⁵ Lo Spiffiero (2015). 'Mirafiori, approvato progetto rigenerazione urbana.' Available at http://lospiffiero.com/ls_article.php?id=23003.
- ³⁶ Eltis (2014). 'A new Sustainable Urban Mobility Plan has been approved in Turin (Italy).' Available at www.eltis.org/discover/news/new-sustainable-urban-mobility-plan-has-been-approved-turin-italy-0.
- ³⁷ Systra (n.d.). 'Turin Metro – Line 1.' Available at www.systra.com/en-project/turin-metro-line-1.
- ³⁸ Eurostat Press Office (2016). *Hourly labour costs ranged from €4.1 to €41.3 across the EU Member States in 2015*. Eurostat Press Release (2016: 61). Eurostat Press Office: Luxembourg. Available at <http://ec.europa.eu/eurostat/documents/2995521/7224742/3-01042016-AP-EN.pdf/453419da-91a5-4529-b6fd-708c2a47dc7f>.
- ³⁹ JLL (2016). *Torino Urban Profile 2016*. JLL: Milan. Available at www.centroestero.org/repository/13_05_2016_9_30_jll-torino-urban-profile-2016.pdf.
- ⁴⁰ World Bank (2017). 'Ease of Doing Business in Turin – Italy.' Available at www.doingbusiness.org/data/exploreeconomies/italy/sub/turin#starting-a-business.
- ⁴¹ Amnesty International (2017). 'EU Executive fails to act as pregnant Romani women and infants are rendered homeless in Italy.' Available at www.amnesty.org/en/latest/news/2017/06/eu-executive-fails-to-act-as-pregnant-romani-women-and-infants-are-rendered-homeless-in-italy/.
- ⁴² OECD (n.d.). 'Metropolitan areas.' Database. Available at <https://stats.oecd.org/Index.aspx?DataSetCode=CITIES>.
- ⁴³ Power, A. (2016). *Torino City Story*. CASE Report. London School of Economics: London. Available at <http://sticerd.lse.ac.uk/dps/case/cr/casereport106.pdf>.
- ⁴⁴ Colantonio, R., Burdett, R. & Rode, P. (2013). *Transforming Urban Economies: Policy Lessons from European and Asian Cities*. Routledge: Abingdon, UK.
- ⁴⁵ PwC (2016). *Real Estate Market Overview – Italy 2016*. PwC Italy. Available at: <https://www.pwc.com/it/it/publications/assets/docs/real-estate-2016.pdf>.
- ⁴⁶ Caldarera, M. (2017). 'FDI: Italy has successfully moved up three spots in 2017.' Savills (2016). 'Cross border investment dominates Italian real estate activity.'
- ⁴⁷ Schwab, K. (2016) (ed.). *The Global Competitiveness Report 2016–2017*.
- ⁴⁸ Nauwelaers, C., Maguire, K. & Ajmone Marsan, G. (2013). *The case of Oresund (Denmark-Sweden) – Regions and Innovation: Collaborating Across Borders*. OECD Regional Development Working Papers (2013:21). OECD Publishing: Paris. Available at <https://www.oecd.org/cfe/regional-policy/publicationsdocuments/Oresund.pdf>.
- ⁴⁹ Transportation for America & MZ Strategies LLC (2014). *The Innovative MPO: Smart Planning, Strong Communities. A Guidebook for Metropolitan Transportation Planning*. Transportation for America: Washington, D.C. Available at <http://www.t4america.org/wp-content/uploads/2014/12/The-Innovative-MPO.pdf>.

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