

# **The European Commission's science and knowledge service**

## **Joint Research Centre**



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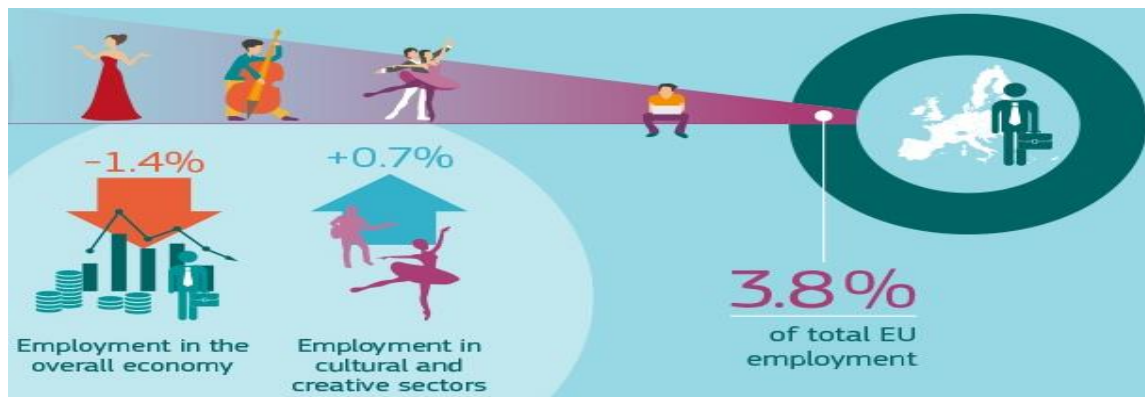
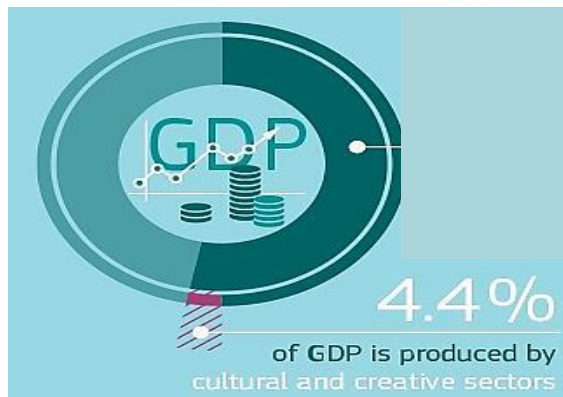
# **The Cultural and Creative Cities Monitor 2017 Edition**

**#EUCreativeCities**

***Valentina Montalto, Carlos Jorge Tacao Moura, Sven Langedijk, Michaela Saisana***

**Composite Indicators and Scoreboard  
--- COMMUNITY of PRACTICE ---  
2<sup>nd</sup> Annual Meeting**

## Culture is an economic sector in its own



## ..helps thrive innovation and growth



*"It is in Apple's DNA that technology alone is not enough—it's technology married with liberal arts, married with the humanities, that yields us the results that make our heart sing."*

*Steve Jobs*

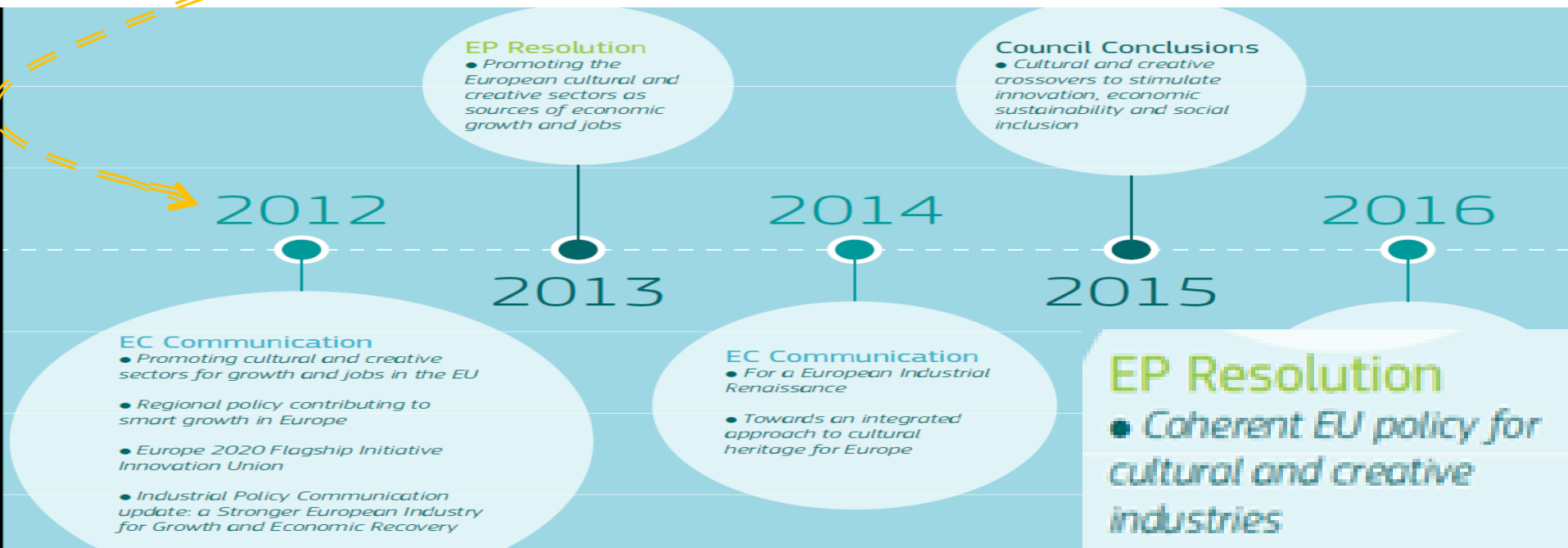
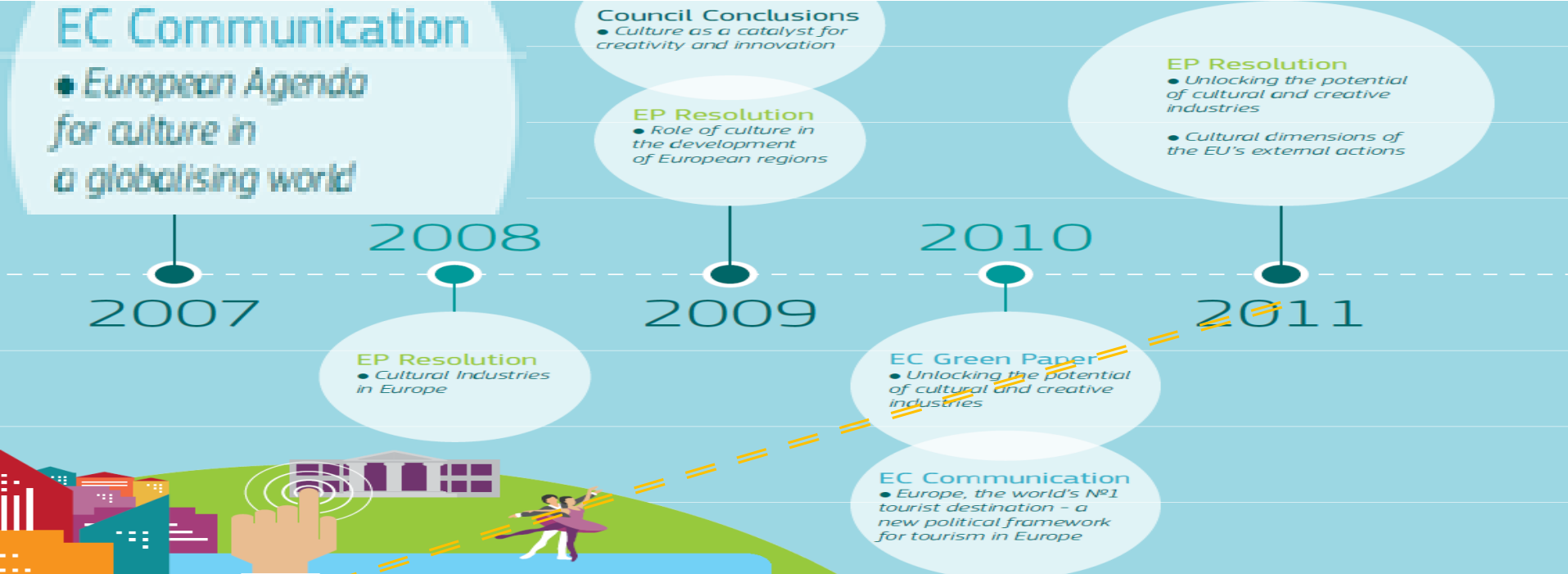
## ..and attract highly educated people to cities



Sources: Clark et al. (2002); Bakhshi et al. (2008); Backman and Nilsson (2016); Boschma and Fritsch (2009); European Commission (2016); Eurostat (EU-Labour Force Survey); Nelson et al. (2015); Sleuwaegen and Boiardi (2014), TERA (2014).

# EC Communication

## European Agenda for culture in a globalising world



# Why a Cultural and Creative Cities Monitor

## THE CULTURAL AND CREATIVE CITIES MONITOR

2017 edition

*Culture and creativity are vital in driving economic and social development. Our new Monitor will help cities across Europe make the most of this potential.*

Commissioner Tibor Navracsics

@TNavracsicsEU



#EUCreativeCities

Cultural and Creative Cities Monitor online:

<https://composite-indicators.jrc.ec.europa.eu/cultural-creative-cities-monitor>





**1.** Facilitate the **evaluation** of cities' **strenghts** and **impact of policy actions** and foster **mutual learning**.



**2.** Illustrate and **communicate the importance of culture and creativity** to support socioeconomic **development** and strenghten **resilience**.



**3.** Inspire **research** questions to further understand the **role of culture and creativity in local development**.

# 40 monitoring tools reviewed

CCI-CCI Creative City Index 2012

Global Power

The Global Power City Index (GPCI) evaluates and ranks the major cities of the world according to their "magnetism," i.e. their comprehensive power which allows them to attract creative individuals and business enterprises from every continent and to mobilize their assets in securing economic, social, and environmental development. GPCI evaluates the comprehensive power of forty of the world's leading cities according to six main functions (Economy, Research and Development, Cultural Interaction, Livability, Environment and Accessibility) representing city strength.



A STUDY ON HONG KONG  
CREATIVITY INDEX

At Kearney

< Return to Research Studies

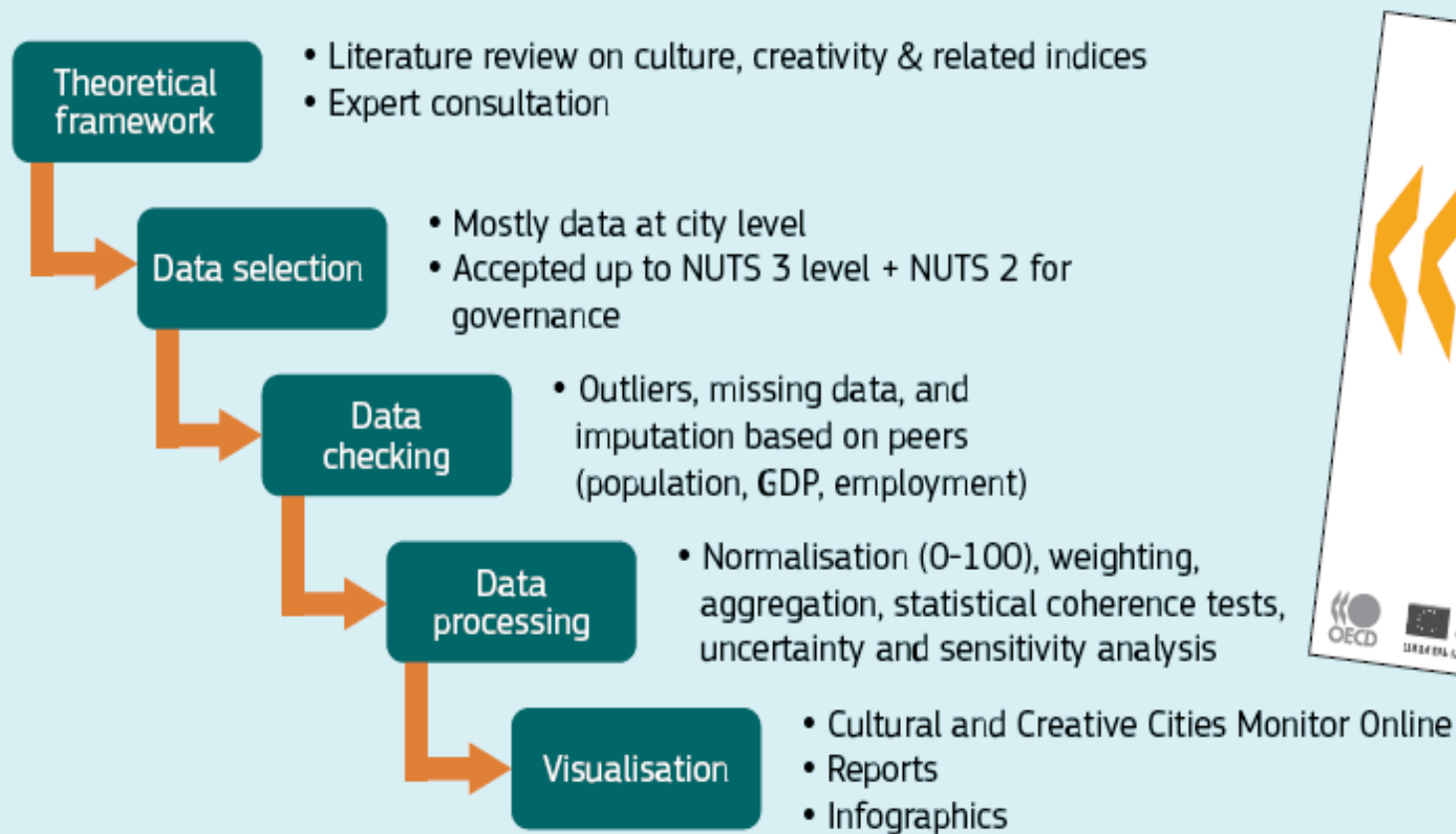
Global Cities 20

THE GLOBAL  
CREATIVITY INDEX  
2015



European  
Commission










# Methodology in a nutshell





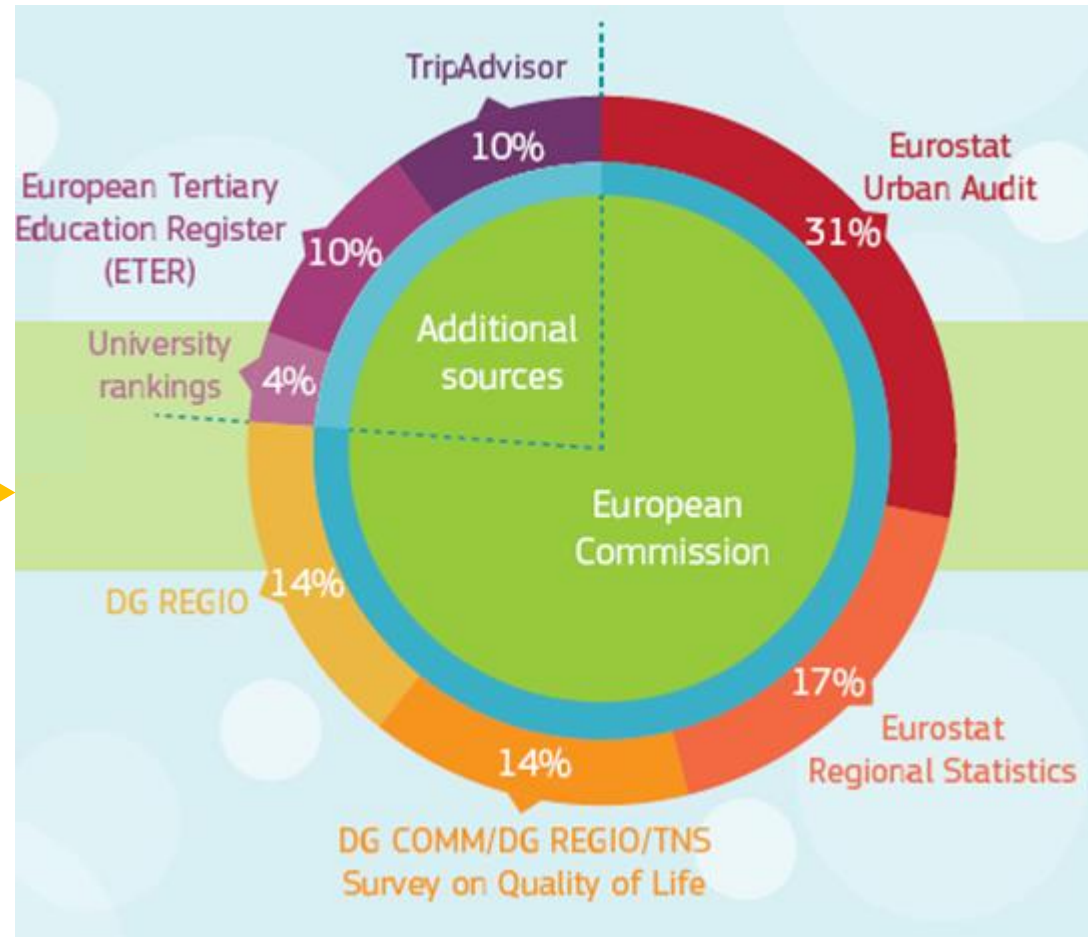
# *A nine-dimensional model*



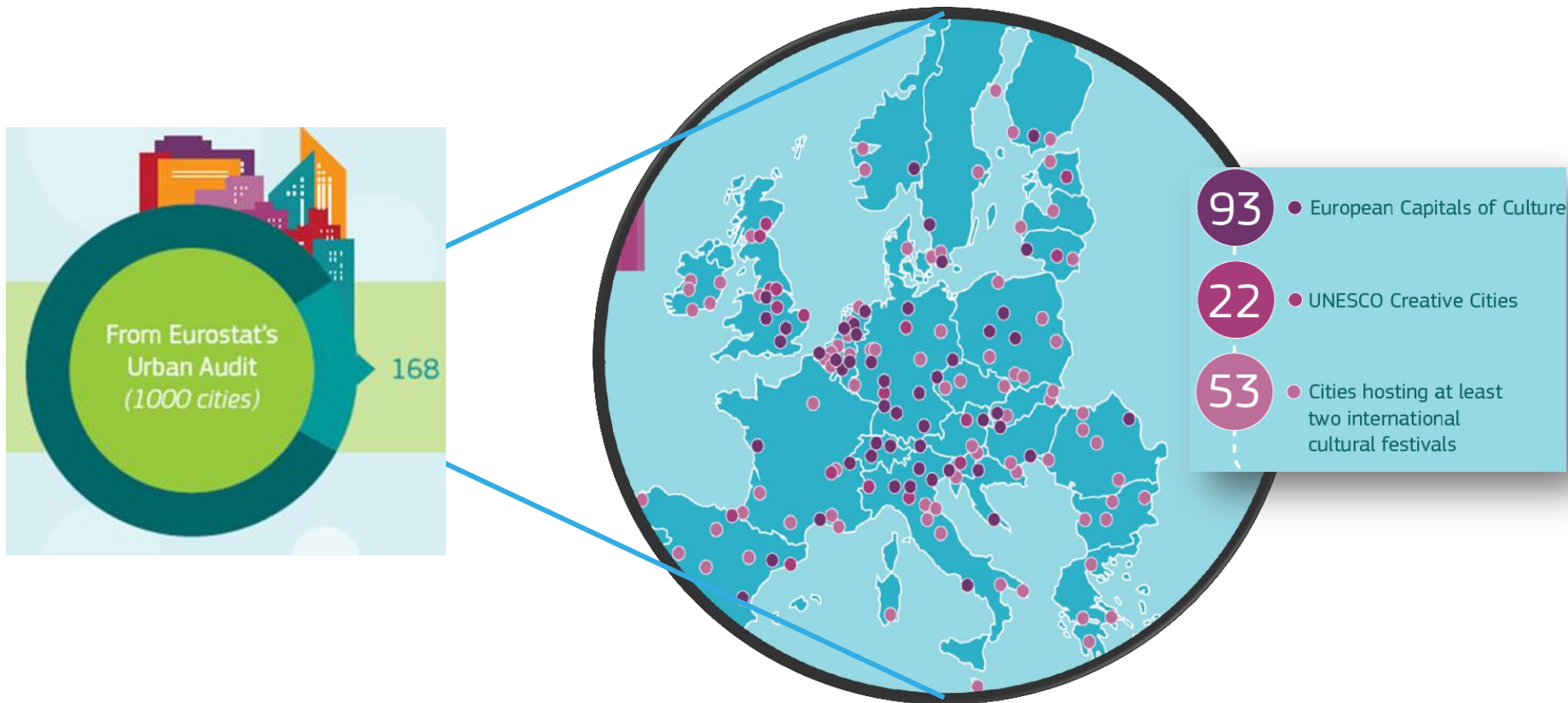
Sub-indices	Dimensions		Indicators	
			29 out of 200 initially considered	
1. Cultural Vibrancy		1.1 Cultural Venues & Facilities	1	Sights & landmarks
			2	Museums
			3	Cinema seats
			4	Concerts & shows
			5	Theatres
		1.2 Cultural Participation & Attractiveness	6	Tourist overnight stays
			7	Museum visitors
			8	Cinema attendance
			9	Satisfaction with cultural facilities
2. Creative Economy		2.1 Creative & Knowledge-based Jobs	10	Jobs in arts, culture & entertainment
			11	Jobs in media & communication
		2.2 Intellectual Property & Innovation	12	Jobs in other creative sectors
			13	ICT patent applications
		2.3 New Jobs in Creative Sectors	14	Community design applications
			15	Jobs in new arts, culture & entertainment enterprises
			16	Jobs in new media & communication enterprises
			17	Jobs in new enterprises in other creative sectors
3. Enabling Environment		3.1 Human Capital & Education	18	Graduates in arts & humanities
			19	Graduates in ICT
			20	Average appearances in university rankings
		3.2 Openness, Tolerance & Trust	21	Foreign graduates
			22	Foreign-born population
			23	Tolerance of foreigners
			24	Integration of foreigners
		3.3 Local & International Connections	25	People trust
			26	Passenger flights
			27	Potential road accessibility
		3.4 Quality of Governance	28	Direct trains to other cities
			29	Quality of governance

# Data sources

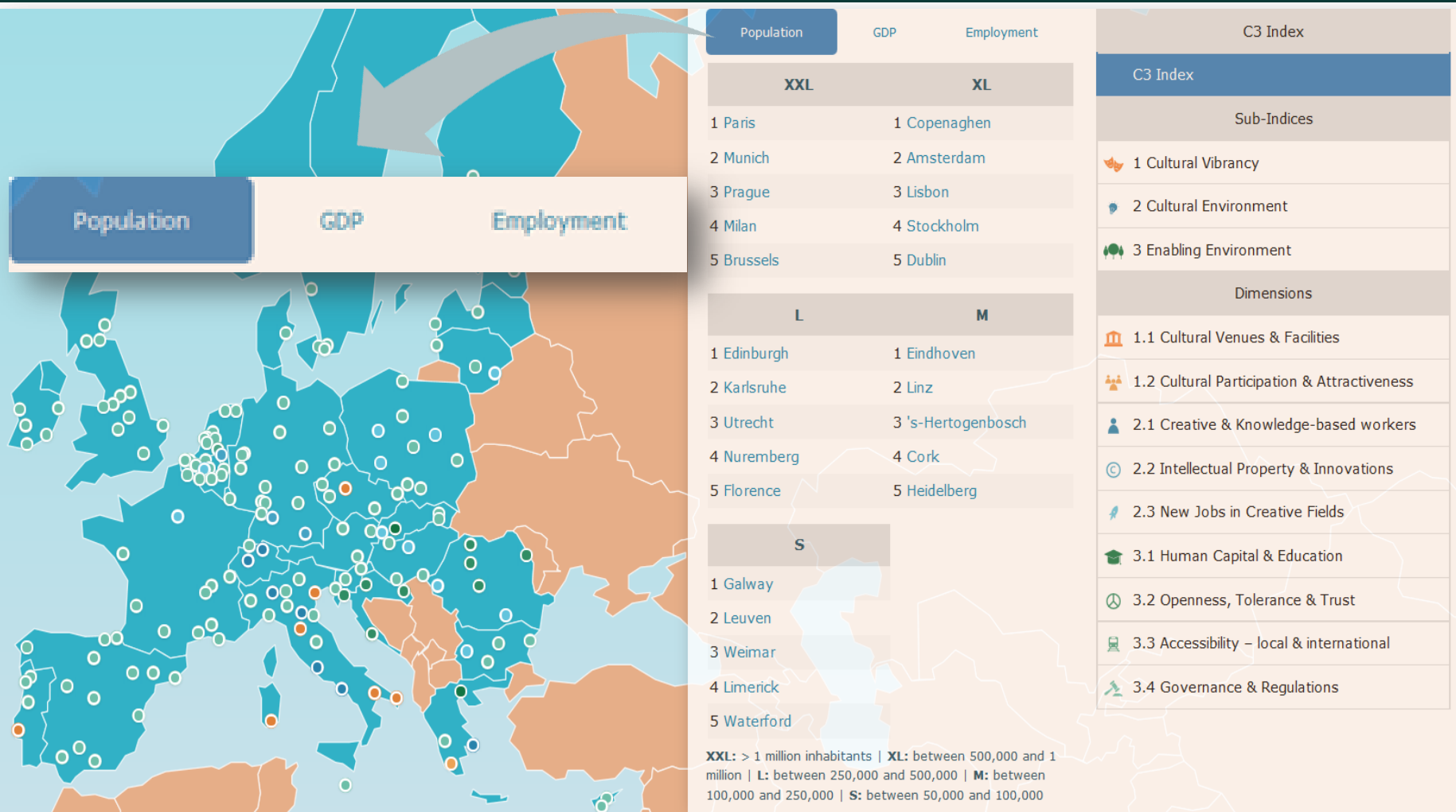
Sub-indices	Dimensions	Indicators
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	3.4 Quality of Governance	28 Direct trains to other cities
		29 Quality of governance



# 168 cities, beyond 'usual suspects'

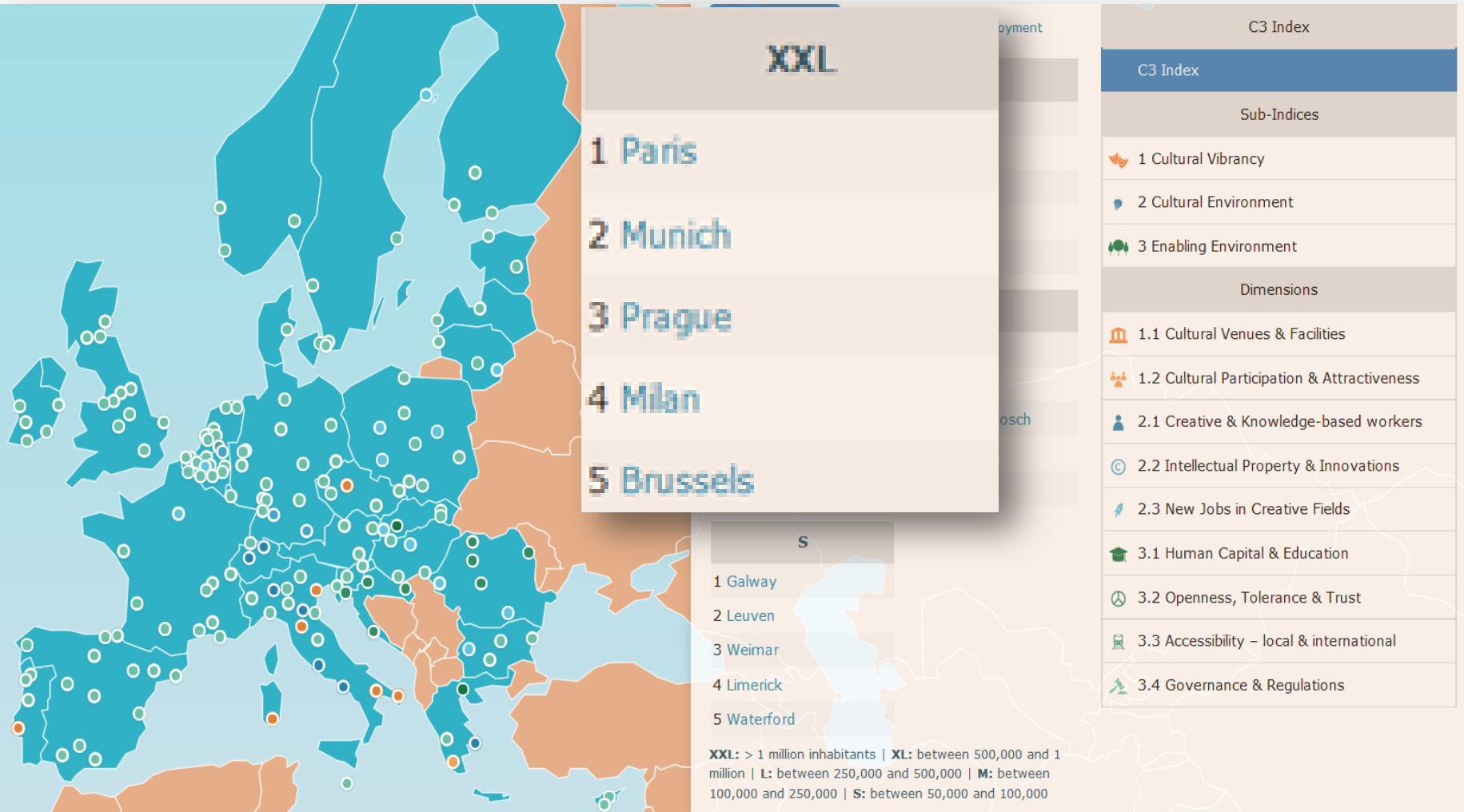


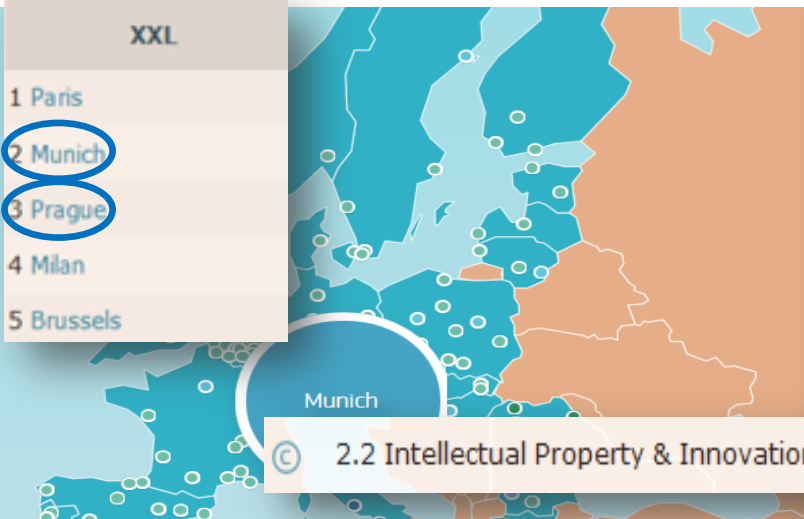
# Benchmarking peer cities



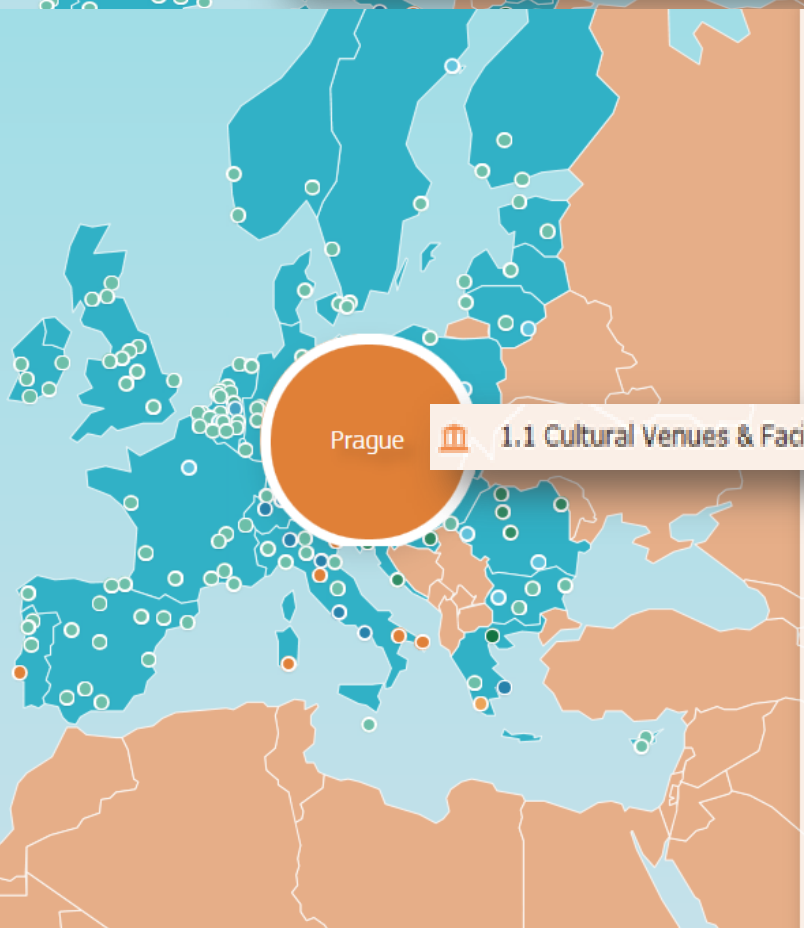
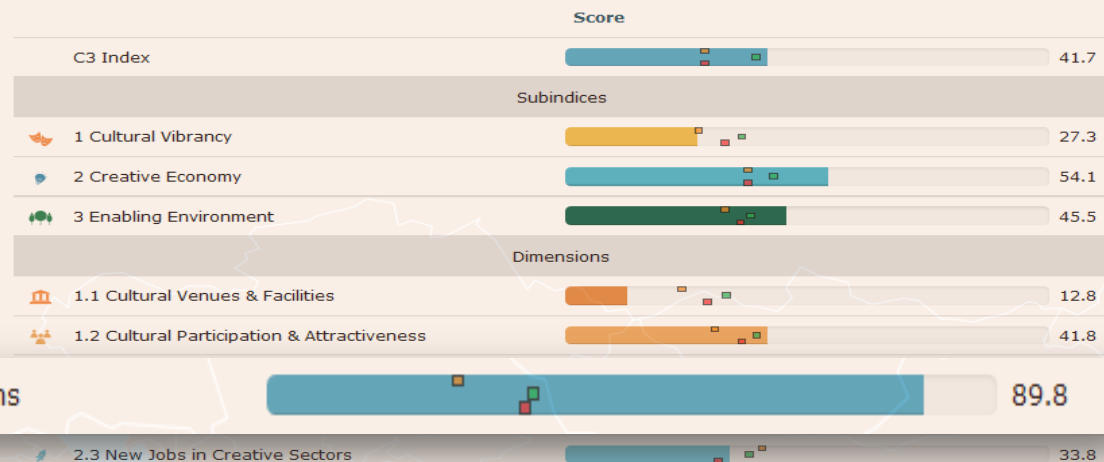


# Cities rely on different strenghts

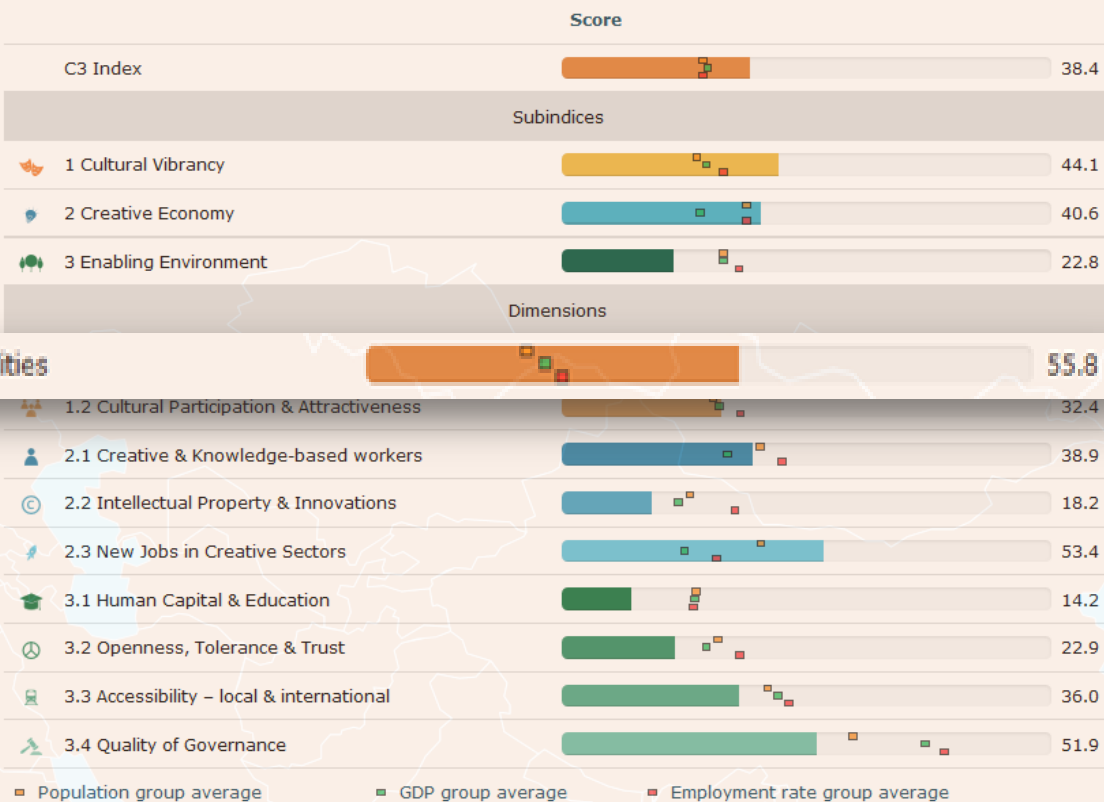




## Munich



## Prague



Population group 1: >1,000,000 | GDP group 2: €25,000-30,000 | Employment group 1: >77% | group XXL: >1,000,000

XXL

- 1 Paris
- 2 Munich
- 3 Prague
- 4 Milan
- 5 Brussels

Milan

## Milan

Score

C3 Index

38.4

Subindices



1 Cultural Vibrancy

41.1



2 Creative Economy

36.8



3 Enabling Environment

36.2

Dimensions



1.1 Cultural Venues &amp; Facilities

31.8



1.2 Cultural Participation &amp; Attractiveness

50.3

2.1 Creative &amp; Knowledge-based workers

54.0

## Milan

Italy

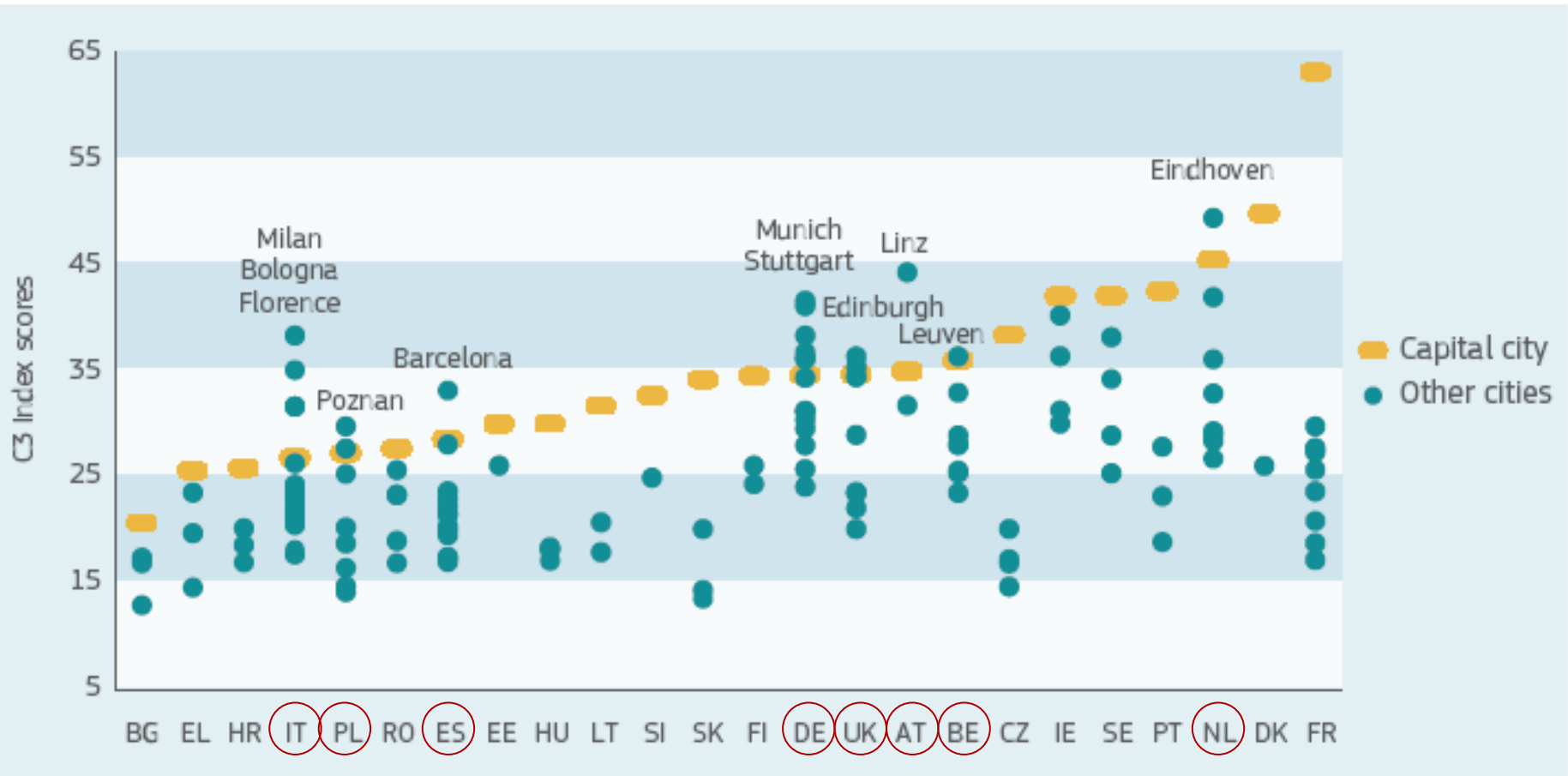
Population group 1: >1,000,000 | GDP group 1: >€30,000 | Employment group 2: 73%-77% | group XXL: >1,000,000

### Did you know that...?

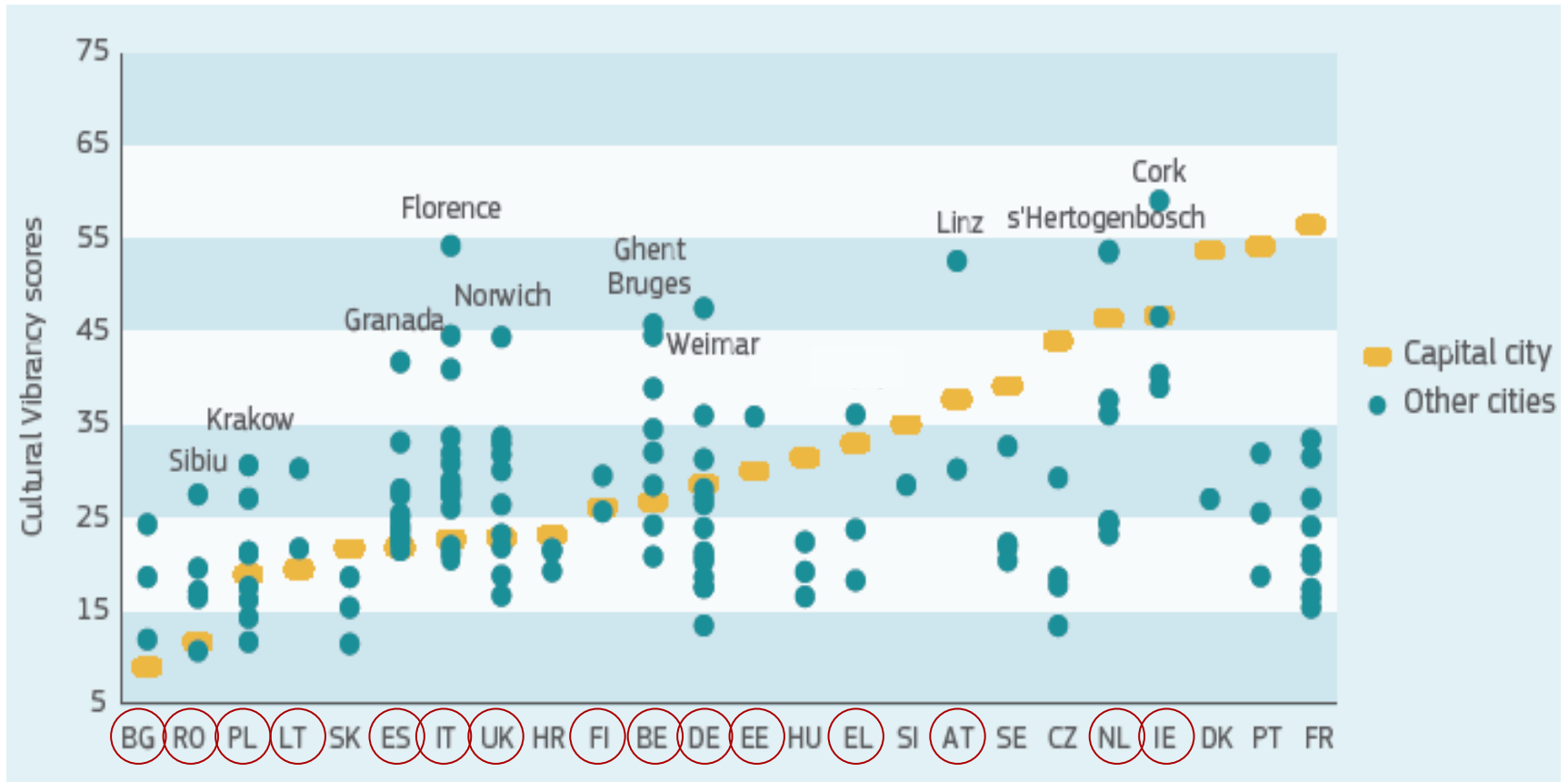
- **The** city has recently experienced a great cultural development thanks to its vibrant network of private and public cultural institutions: civic museums have registered growth, new museums (e.g. the Museum of Cultures) and exhibition centres (e.g. the Prada and Armani Silos Foundations) have opened, a flourishing theatre system is now in place, as well as a circuit of public and private libraries and of cinema screens and an increasing number of festivals and open-air arenas, but also creative hubs and creative start-ups.

- **Milan's** museums, theatres and cultural landmarks — amongst which the Milan Duomo, the Castello Sforzesco, the Teatro alla Scala and The last supper painting by Leonardo Da Vinci, a UNESCO World Heritage Site, attract more than 5 million visitors every year, together with the Palazzo Reale, the largest and most visited art exhibition centre in Italy.
- **Milan** is also the capital of the Italian publishing industry, with its publishers, libraries and literary and cultural circles. Hosting the Bookcity book festival and the Tempo di Libri book fair, Milan has also developed an innovative model aimed to promote books and reading with an extraordinary variety and richness of events and initiatives.
- **A** rich calendar of events animates the city (including four Europe for Festivals, Festivals for Europe-labelled festivals). This is organised around two formats: the 'urban format', with events throughout the city such as Bookcity, Prima della Scala Diffusa, Museo City and Piano City, and the 'week format', with a focus on an international trade fair or business-gathering enriched by events organised as part of Music Week, Art Week and the Photo Week.

# Capitals fly high but not always the highest



# Capitals fly high but not always the highest





# *Leading Cultural and Creative Cities are more resilient*

In 2013, the GDP per capita of European Cultural and Creative Cities was € 750 higher for each additional point in the Cultural and Creative Cities Index, compared to 2009.



# Create your own Monitor

The screenshot shows the 'Cultural and Creative Cities Monitor' website. At the top, there's a header with the European Commission logo and the title 'Cultural and Creative Cities Monitor'. Below this is a navigation bar with links: Home, About, Cities, Countries, Create your own Monitor (highlighted), Plots, and FAQ. The main content area has a yellow box on the left with the text 'Move the sliders according to the importance of the different components of the C3 Index in your city.' and a button 'Add your city'. To the right, another yellow box explains the two types of ranks: 'Full rank' (all cities) and 'Group rank' (cities in the same group). Below these, there's a 'Groups' dropdown menu set to 'Full ranking'. A 'Ranking' section shows a horizontal bar chart with dimensions (orange, blue, green) and a score column on the right. The scores range from 63.2 down to 42.6. An 'Important note!' box states that adding a city is a local functionality and no data will be uploaded to the official monitor. A large button at the bottom says 'Click to add your city'.

European Commission

## Cultural and Creative Cities Monitor

A tool to promote mutual exchange and learning between cities to boost culture-led development

European Commission / EU Science Hub / Cultural and Creative Cities Monitor

Home About Cities Countries **Create your own Monitor** Plots FAQ

Move the sliders according to the importance of the different components of the C3 Index in your city.

**Add your city**

**Important note!**

Adding your city is a local functionality. No data will be uploaded to the official C3 monitor.

**Click to add your city**

**There are 2 types of ranks available:**

- Full rank - containing all the cities selected for the first edition of the Cultural and Creative Cities Monitor
- Group rank - containing only cities in the same group

**Groups**

Full ranking

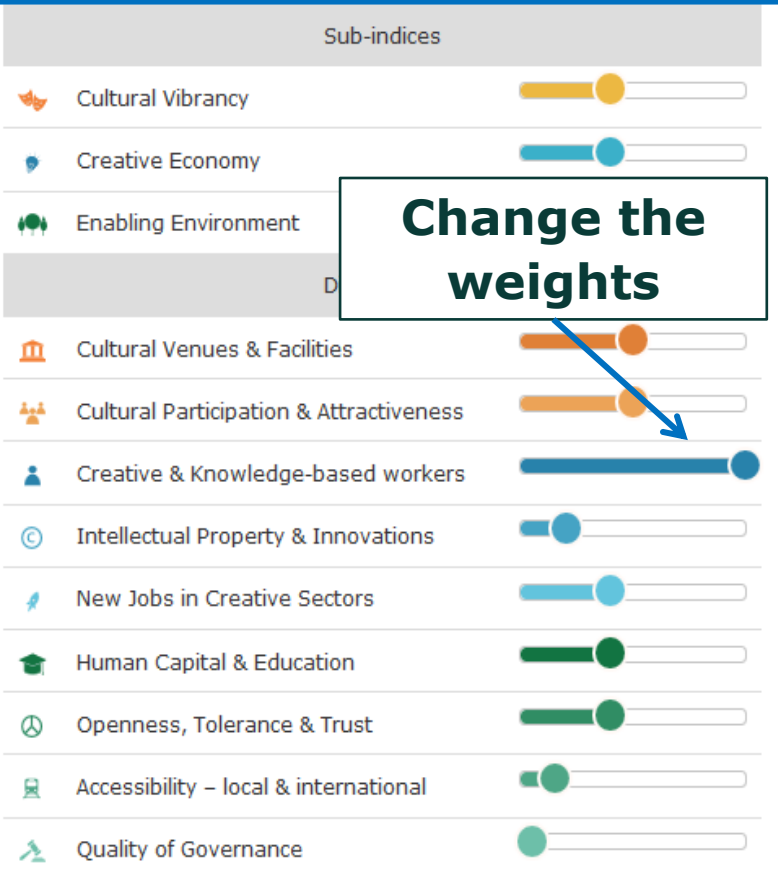
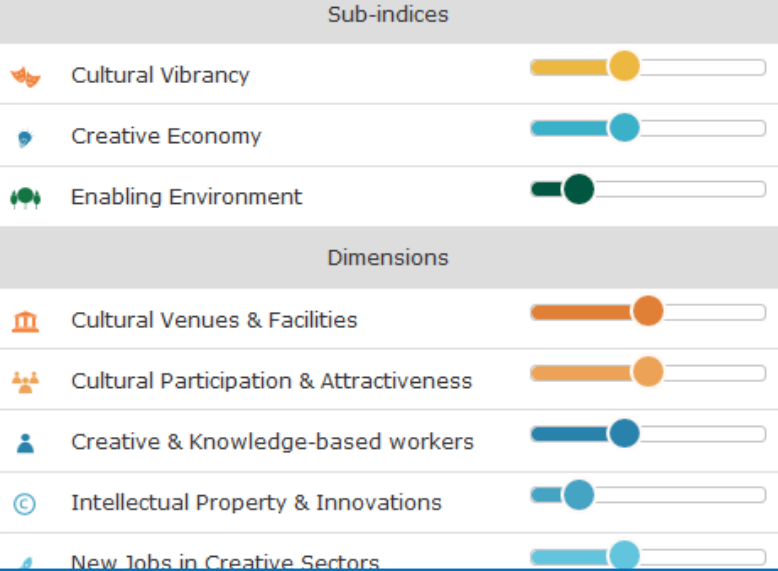
**Ranking**

Dimensions ▼

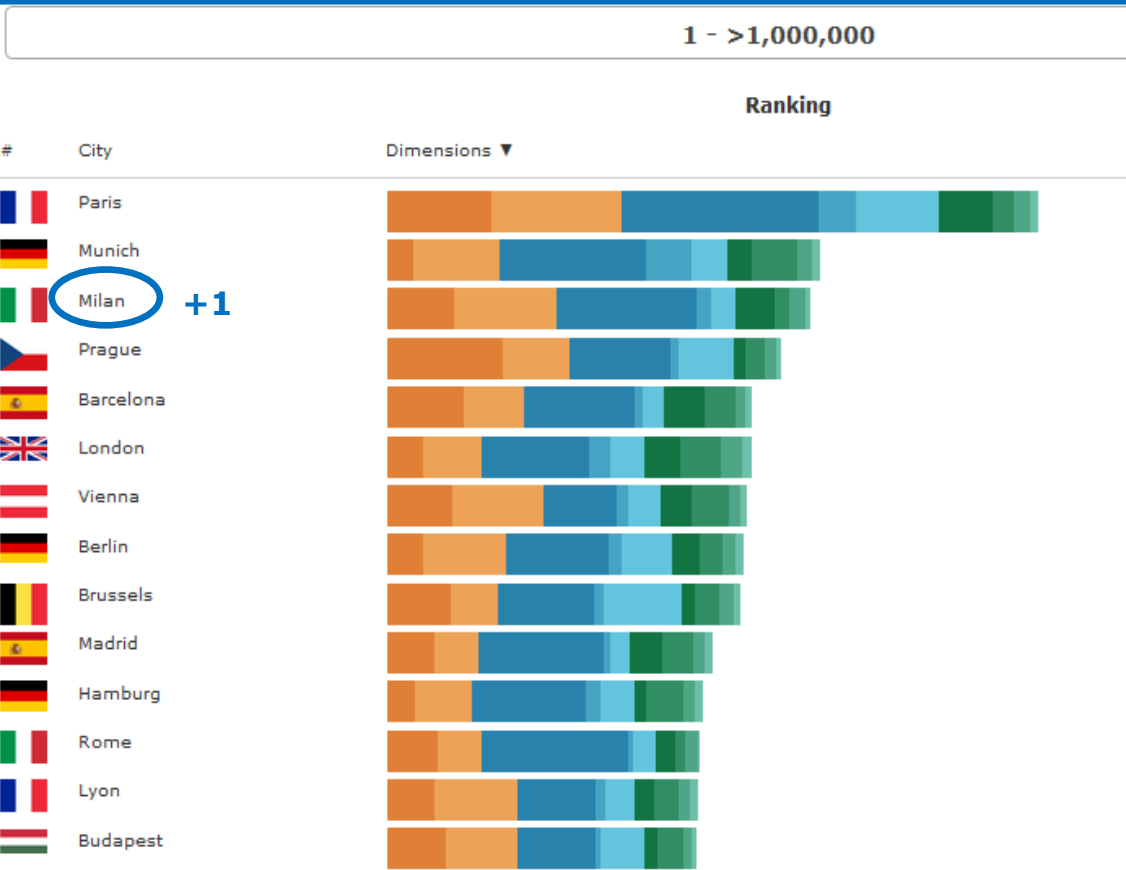
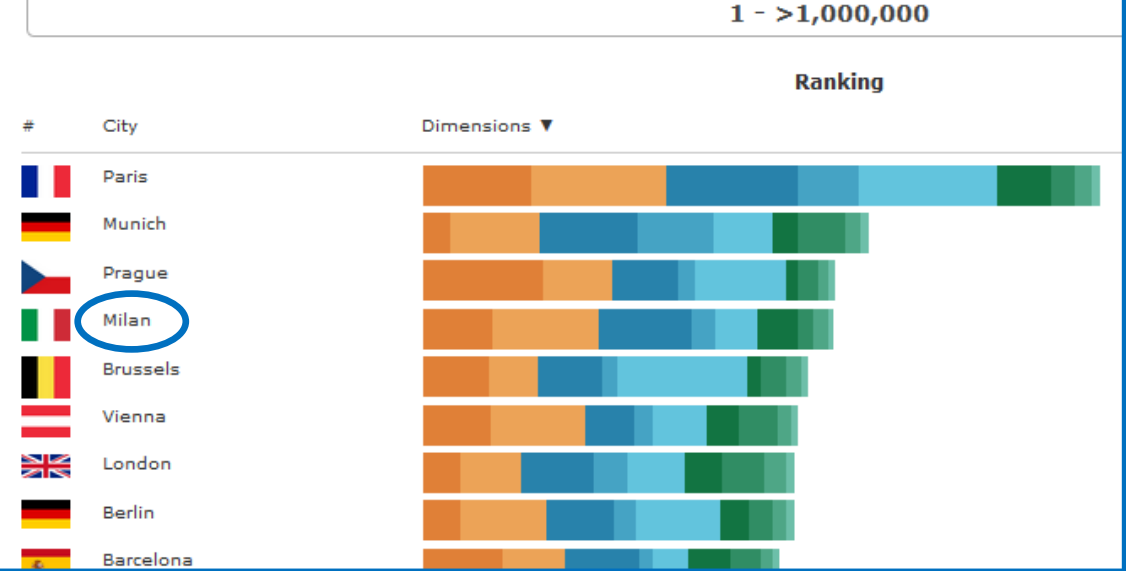
	63.2
	49.9
	49.5
	45.5
	45.2
	44.3
	42.6

Score ▼

↑  
**Test your data**



Change the weights



# Next steps

## CCCM'S APP OFFICIAL LAUNCH



2017 -----> 2018 -----> 2019

### C3 MONITOR OFFICIAL LAUNCH

- Online Tool
- Policy Report
- Country Fact Sheets



### C3 MONITOR UPDATE

- Online Tool
- Policy Report
- Country Fact Sheets



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# More on the online visualisation tool




**Report - 2017**  
2017 report of the Cultural and Creative Cities Monitor.

Download




**Executive summary**  
Graphical overview of the Creative Cities Monitor project.

Download



**Key Findings**  
Graphical overview of the Creative Cities Monitor main findings.

Download



**Country Fact Sheet**  
Short overview of the performance of the selected cities in each country.

Belgium ▾

Download



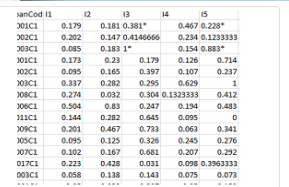
**Annex A**  
Description of the methodology used to create the Cultural and Creative Cities Monitor.

Download



**Annex B**  
Statistical assessment of the Cultural and Creative Cities Index.

Download



**Annex C**  
Comprehensive set of data compiled for the Cultural and Creative Cities Monitor.

Download

<https://composite-indicators.jrc.ec.europa.eu/cultural-creative-cities-monitor>



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# *Thank you*



## Any questions?

You can find me at [jrc-coin@ec.europa.eu](mailto:jrc-coin@ec.europa.eu)

**COIN in the EU Science Hub**

<https://ec.europa.eu/jrc/en/coin>

**COIN tools are available at:**










<https://composite-indicators.jrc.ec.europa.eu/>

The European Commission's  
Competence Centre on Composite  
Indicators and Scoreboards



European  
Commission

# Appendix

	Weight	Sub-indices	Weight	Dimensions		Indicators	
Index	40%	1. Cultural Vibrancy	50%		1.1 Cultural Venues & Facilities	1	Sights & landmarks
			50%		1.2 Cultural Participation & Attractiveness	2	Museums
						3	Cinema seats
						4	Concerts & shows
						5	Theatres
						6	Tourist overnight stays
						7	Museum visitors
						8	Cinema attendance
						9	Satisfaction with cultural facilities
	40%	2. Creative Economy	40%		2.1 Creative & Knowledge-based Jobs	10	Jobs in arts, culture & entertainment
			20%		2.2 Intellectual Property & Innovation	11	Jobs in media & communication
						12	Jobs in other creative sectors
			40%		2.3 New Jobs in Creative Sectors	13	ICT patent applications
						14	Community design applications
						15	Jobs in new arts, culture & entertainment enterprises
	20%	3. Enabling Environment	40%		3.1 Human Capital & Education	16	Jobs in new media & communication enterprises
			40%		3.2 Openness, Tolerance & Trust	17	Jobs in new enterprises in other creative sectors
18						Graduates in arts & humanities	
19						Graduates in ICT	
20						Average appearances in university rankings	
21						Foreign graduates	
15%				3.3 Local & International Connections	22	Foreign-born population	
					23	Tolerance of foreigners	
					24	Integration of foreigners	
5%				3.4 Quality of Governance	25	People trust	
					26	Passenger flights	
					27	Potential road accessibility	
					28	Direct trains to other cities	
					29	Quality of governance	

Variable name	Short explanation	Geo level	Reference period	Mode year	Availability	Source
Sub-Index 1	Cultural Vibrancy					
Dimension 1.1	Cultural Venues & Facilities					
1. Sights & landmarks	Points of historical, cultural and or artistic interest, such as architectural buildings, religious sites, monuments and statues, churches and cathedrals, bridges, towers and fountains, amongst other things, divided by the total population and then multiplied by 100,000.	City	2016	2016	99%	TripAdvisor
2. Museums	Number of museums that are open to the public divided by the total population and then multiplied by 100,000.	City	2016	2016	100%	TripAdvisor
3. Cinema seats	Number of cinema seats in the city divided by the total population and then multiplied by 1,000.	City	2011-2014	2011	57%	Eurostat (Urban Audit)
4. Concerts & shows	Number of theatres and other music venues (concert halls, clubs, etc.) and current shows divided by the total population and then multiplied by 100,000.	City	2016	2016	94%	TripAdvisor
5.Theatres	Number of theatres in the city divided by the total population and then multiplied by 100,000.	City	2011-2014	2011	64%	Eurostat (Urban Audit)
Dimension 1.2	Cultural Participation & Attractiveness					
6. Tourist overnight stays	Total annual number of nights that tourists/guests have spent in tourist accommodation establishments (hotel or similar) divided by the total population.	City	2010-2014	2014	84%	Eurostat (Urban Audit)
7. Museum visitors	Total number of museum tickets sold during the reference year divided by the total population and then multiplied by 1,000.	City	2011-2014	2011	71%	Eurostat (Urban Audit)
8. Cinema attendance	Total number of tickets sold, referring to all films screened during the year, divided by the total population and then multiplied by 1,000.	City	2011-2014	2011	52%	Eurostat (Urban Audit)
9. Satisfaction with cultural facilities	Percentage of the population that is very satisfied with cultural facilities in the city.	City	2015	2015	32%	Flash Eurobarometer 366 by TNS/EC (Survey on 'Quality of life in cities')



Sub-index 2	Creative Economy					
Dimension 2.1	Creative & Knowledge-based Jobs					
10. Jobs in arts, culture & entertainment	Number of jobs in arts, culture- and entertainment-related activities such as performing arts, museums and libraries, divided by the total population and then multiplied by 1,000 (NACE Rev. 2, R-U).	City	2011-2014	2011	81%	Eurostat (Urban Audit)
11. Jobs in media & communication	Number of jobs in media and communication-related activities such as book and music publishing, film production and TV, divided by the total population and then multiplied by 1,000 (NACE Rev. 2, J).	City	2011-2014	2011	70%	Eurostat (Urban Audit)
12. Jobs in other creative sectors	Number of jobs in professional, scientific and technical, administrative and support service activities such as architecture, advertising, design, and photographic activities, divided by the total population and then multiplied by 1,000 (NACE Rev. 2, M-N).	City	2011-2014	2011	70%	Eurostat (Urban Audit)
Dimension 2.2	Intellectual Property & Innovation					
13. ICT patent applications	Three-year average number of ICT patent applications (including: consumer electronics, computers and office machinery, and telecommunications) filed to the European Patent Office (EPO) by priority year divided by the total population and then multiplied by 1 million.	NUTS 3	2010-2012	Average	95%	Eurostat (Regional Statistics)
14. Community design applications	Three-year average number of Community Design applications filed to the Office for Harmonization in the Internal Market (OHIM) divided by the total population and then multiplied by 1 million.	NUTS 3	2013-2015	Average	82%	Eurostat (Regional Statistics)
Dimension 2.3	New Jobs in Creative Sectors					
15. Jobs in new arts, culture & entertainment enterprises	Number of persons employed in the enterprises established in the reference year in arts, culture and entertainment activities such as performing arts, museums and libraries, divided by the total population and then multiplied by 100,000.	NUTS 3	2010-2013	2013	43%	Eurostat (Regional Statistics)
16. Jobs in new media & communication enterprises	Number of persons employed in the enterprises established in the reference year in in media and communication activities such as book and music publishing, film production and TV, divided by the total population and then multiplied by 100,000.	NUTS 3	2010-2013	2013	42%	Eurostat (Regional Statistics)
17. Jobs in new enterprises in other creative sectors	Number of persons employed in the enterprises established in the reference year in professional, scientific and technical activities such as architecture, advertising, design, and photographic activities, divided by the total population and then multiplied by 100,000.	NUTS 3	2010-2013	2013	43%	Eurostat (Regional Statistics)

Dimension 3.1	Human Capital & Education					
18. Graduates in arts & humanities	Average number of tertiary education students (ISCED 2011 levels 5-8) enrolled in the academic years 2010-2011, 2011-2012 and 2012-2013 in arts and humanities courses divided by the total population and then multiplied by 100,000.	City	2010-2013	Average	88%	ETER project
19. Graduates in ICT	Average number of tertiary education graduates (ISCED 2011 levels 5-8) in the academic years 2010-2011, 2011-2012 and 2012-2013 in Information and communication technologies courses divided by the total population and then multiplied by 100,000.	City	2010-2013	Average	88%	ETER project
20. Average appearances in university rankings	Average number of universities' appearances in four different university rankings: QS, Shanghai, Leiden and Times.	City	2014	2014	100%	QS, Shanghai, Leiden, Times rankings
Dimension 3.2	Openness, Tolerance & Trust					
21. Foreign graduates	Average number of foreign graduates in tertiary education courses in the academic years 2010-2011, 2011-2012 and 2012-2013 as a percentage of the total number of tertiary education graduates (ISCED 2011 levels 5-8) in the same academic years.	City	2010-2013	2012	62%	ETER project
22. Foreign-born population	Percentage of the total population who is foreign-born.	City	2011-2014	2011	73%	Eurostat (Urban Audit)
23. Tolerance of foreigners	Percentage of the population who very strongly agrees with the statement: 'The presence of foreigners is good for this city'.	City	2015	2015	32%	Flash Eurobarometer 366 by TNS/EC (Survey on 'Quality of life in cities')
24. Integration of foreigners	Percentage of the population who very strongly agrees with the statement: 'Foreigners who live in this city are well integrated'.	City	2015	2015	32%	Flash Eurobarometer 366 by TNS/EC (Survey on 'Quality of life in cities')
25. People trust	Percentage of the population who very strongly agrees with the statement: 'Generally	City	2015	2015	32%	Flash Eurobarometer 366 by TNS/EC

Dimension 3.3		Local & International Connections				
26. Passenger flights	Number of passenger flights per day, accessible within 90 minutes of travel by road, divided by the total population and then multiplied by 100,000.	City	2013	2013	86%	DG REGIO
27. Potential road accessibility	Computed indicator based on road network data.	City	2012	2012	86%	DG REGIO
28. Direct trains to other cities	Average hourly number of departures between 6:00 and 20:00 of direct trains to other cities / greater cities divided by the total population and then multiplied by 1 million.	City	2014	2014	86%	DG REGIO
Dimension 3.4		Quality of Governance				
29. Quality of governance	Computed indicator measuring the quality of government in three areas of public services: education, healthcare and law enforcement.	NUTS 2, NUTS 1 and NUTS 0	2013	2013	96%	DG REGIO

Notes

A Community design is a unitary industrial design right that covers the European Union. A design is defined as the appearance of the whole or a part of a product resulting from the features of, in particular, the lines, contours, colours, shape, texture and/or materials of the product itself and/or its ornamentation.

ISCED 5: short cycle tertiary education. ISCED 6: Bachelor’s or equivalent levels Programmes. ISCED 7: Master of equivalent level Programmes. ISCED 8: Doctoral or Equivalent level Programmes.

NACE: is the statistical classification of economic activities in the European Union (EU). NACE is a four-digit classification providing the framework for collecting and presenting a large range of statistical data according to economic activity in the fields of economic statistics (e.g. production, employment and national accounts) and in other statistical domains developed within the European statistical system (ESS). NACE Rev. 2, a revised classification, was adopted at the end of 2006 and applied from 2007 onwards.

[http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Statistical\\_classification\\_of\\_economic\\_activities\\_in\\_the\\_European\\_Community\\_\(NACE\)](http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Statistical_classification_of_economic_activities_in_the_European_Community_(NACE))

**Cities host 72% of UE inhabitants and generate 68% of EU GDP**

Year	Percentage of EU GDP generated by cities
1970	0%
1975	15%
1980	10%
1985	12%
1990	15%
1995	20%
2000	15%
2005	25%
2008	72%
2010	68%