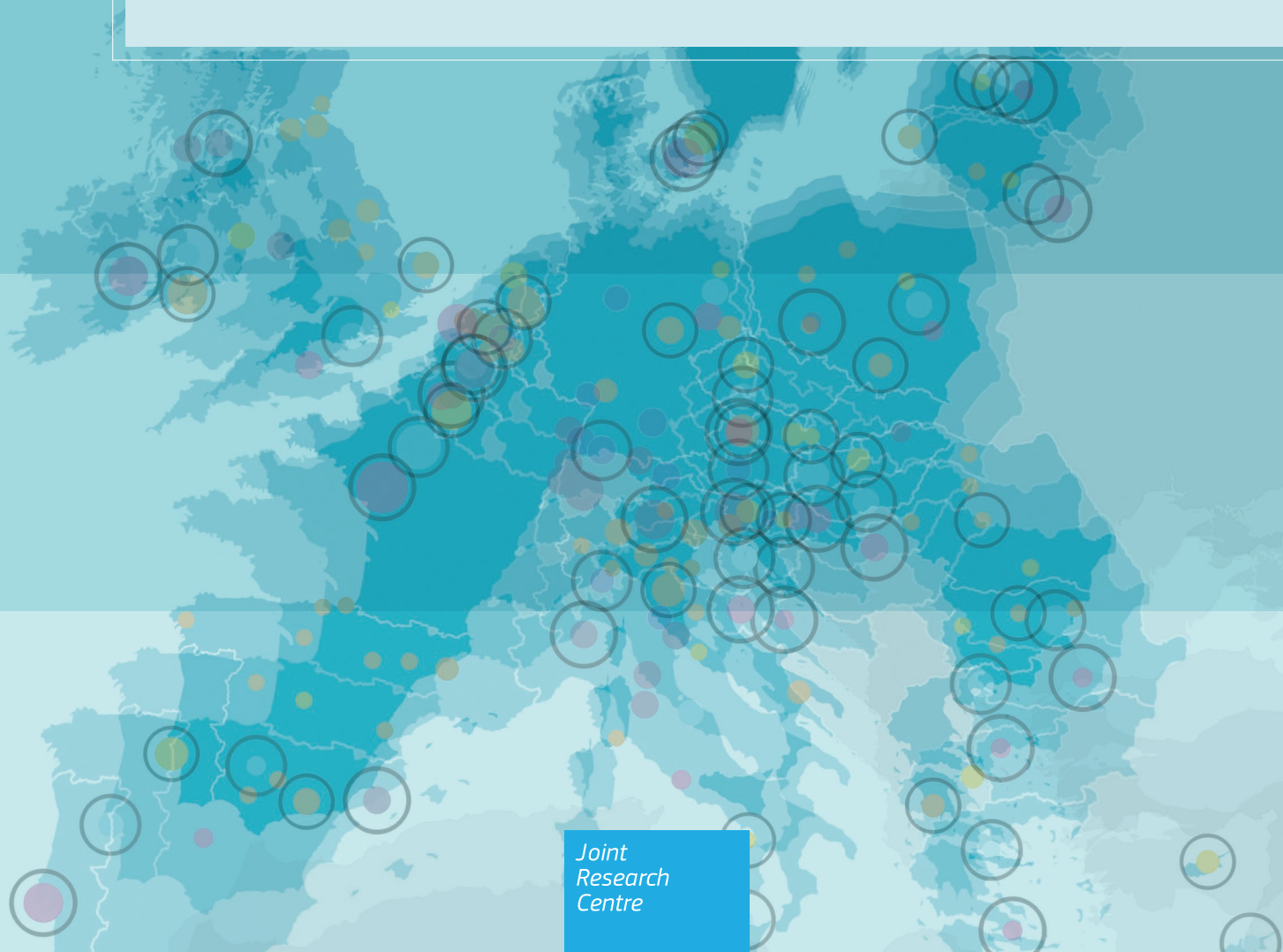


Socio-economic regional microscope series

Are capitals the leading cultural and creative cities in Europe?

Valentina Montalto, Carlos Jorge Tacao Moura, Sven Langedijk,
Michaela Saisana, Francesco Panella



European Commission
Joint Research Centre

Socio-economic regional microscope series

Are capitals the leading cultural and creative cities in Europe?

The cultural and creative sectors are one of the most dynamic branches of the EU economy, fostering innovation, growth and job creation as well as social cohesion. But which cities do perform best in culture and creativity? Does the population size determine their performance? Can small and medium-sized cities be as cultural and creative as capital cities?

The Cultural and Creative Cities Monitor – a new tool developed by the Joint Research Centre (JRC) of the European Commission to monitor and assess the performance of 168 ‘Cultural and Creative Cities’ in Europe vis-à-vis their peers based on a set of 29 carefully selected indicators – tries to fill into this information gap.

The first edition of the Cultural and Creative Cities Monitor, officially released in July 2017, essentially shows a ‘multi-centric’ map of Europe with culture and creativity to be found across many and diverse cities.

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The Cultural and Creative Cities Monitor:

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

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The Socio-economic regional microscope series

The current political and economic challenges faced by the European Union and its Member States call even more for evidence-informed policies. They also require tailor-made policies, developed using highly sophisticated analyses based not only on country-level data, but rather on regional and sub-regional knowledge.

National averages, in particular, bear the risk to present a misleading picture in countries with significant disparities between different regions and areas.

Looking only at national averages can also limit and delay understanding of the differences between regions and cities – identifying leaders and laggards –, as well as prevent the identification of emerging trends in certain socio-economic indicators. Only a detailed analysis of data at regional and local level can bring these insights.

The Joint Research Centre (JRC) of the European Commission has developed the *Socio-economic regional microscope*. It is a new series of short periodical publications which aims to open-up new areas of analysis, and present the stories which can only be told using regional socio-economic data.

Each report presents EU socio-economic indicators according to a data storytelling principle, using a combination of three key elements: data, visuals (maps), and narrative. Each indicator will therefore be represented through maps at regional level (NUTS2), and in some cases even at the NUTS3 and local level.

The *Socio-economic regional microscope* will also show the breadth of the JRC regional analysis in a wide range of research areas: culture, economics, education, energy, healthcare, research and innovation, tourism, etc.

The reports, data and maps are also available on the Territorial Dashboard website of the JRC Knowledge Centre for Territorial Policies, in the *Thematic Analyses* section: <http://urban.jrc.ec.europa.eu/t-board/indic.html>.

Introduction

The cultural and creative sectors (CCSs) are among the most dynamic branches of the EU economy, fostering innovation, growth and job creation¹ as well as social cohesion and wellbeing². Since the adoption of the first 'European Agenda for Culture in a Globalising World' (2007), CCSs have been at the heart of European Union policy-making as major assets in achieving policy objectives beyond economic growth.

Governments at all levels (local, regional, national and European) are increasingly appreciating and investing in CCSs as a competitive economic sector in its own right and having broader impacts on society as a whole. But it is at city level that the transformative power of CCSs is best experienced. CCSs tend to concentrate around cities to benefit from mutual learning or availability of workers with relevant skills³. In turn, they generate positive effects in the areas where they are located; ranging from improved image and increased attractiveness of skilled individuals, investors and tourists to revitalised local economies and greater social pride.

Data availability at city level thus becomes crucial to understand how culture and creativity are spread across Europe. This enables the impact assessment of CCSs on the economy, peoples' lives and ultimately supports evidence-based urban policy-making. The new 'Urban Agenda for the EU'⁴ promotes the production of reliable data to enhance the knowledge base on urban issues as well as the exchange of knowledge and best practices. However, mapping cultural and creative assets and measuring their value and impact in a systematic and comparable way across Europe remains a challenge, with no shared definitions or metrics, particularly at city level.

The Joint Research Centre (JRC) has developed the 'Cultural and Creative Cities Monitor' in order to start filling this information gap. Officially released in July 2017, the Cultural and Creative Cities Monitor is a new tool⁵ that enables local policy-makers and any other interested stakeholders to monitor and assess the performance of **168 'Cultural and Creative Cities'** in Europe vis-à-vis their peers based on a set of **29 carefully selected indicators**.

Cities were selected on the basis of their demonstrable engagement in the promotion of culture and creativity, which was 'operationalised' using the three following criteria:

- **93** cities which have been or will be **European Capitals of Culture** up to 2019, or which have been shortlisted to become European Capitals of Culture up to 2021;
- **22 UNESCO Creative Cities** (including winners in 2015);
- **53 cities hosting** at least two regular **international cultural festivals**.

The results of the analysis show a '**multi-centric**' map of Europe with culture and creativity found across many and diverse cities.

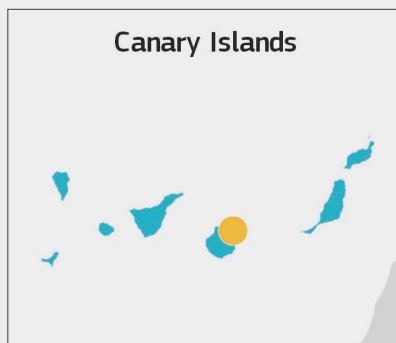
¹ See, amongst others, Bakhshi H., McVittie E. & Simmie J. (2008). *Creating innovation. Do the creative industries support innovation in the wider economy?* NESTA, London; Boschma, R.A. & Fritsch, M. (2009). Creative Class and Regional economic growth: empirical evidence from seven European countries. *Economic Geography*, 85(4), pp. 391-423; Sleuwaegen, L. & Boiardi, P. (2014). Creativity and regional innovation: Evidence from EU regions. *Research Policy*, 43, pp. 1508-1522; Throsby C.D. (2001). *Economics and culture*. Cambridge University Press, Cambridge.

² See, for instance, Matarasso, F. (1997). *Use or ornament? The social impact of participation in the arts*. Blessi, G. T., Grossi, E., Sacco, P. L., Pieretti, G. & Ferilli, G. (2014). Cultural Participation, Relational Goods and Individual Subjective Well-Being: Some Empirical Evidence. *Review of Economics and Finance* (4), pp. 33-46.

³ 'There are several reasons why creative industries are concentrated in urban areas. The main factors are: (i) importance of specific local labour markets; (ii) spillovers from one specific creative industry to another; (iii) firms' access to dedicated infrastructure and collective resources; (iv) project-based work; (v) synergistic benefits of collective learning; and (vi) development of associated services, infrastructure and supportive government policies.' Source: European Commission (2010). *European Competitiveness Report*.

⁴ See more at: http://ec.europa.eu/regional_policy/en/policy/themes/urban-development/agenda

⁵ Available at: <https://composite-indicators.jrc.ec.europa.eu/cultural-creative-cities-monitor/media/c3monitor2017.pdf>



Selection criteria

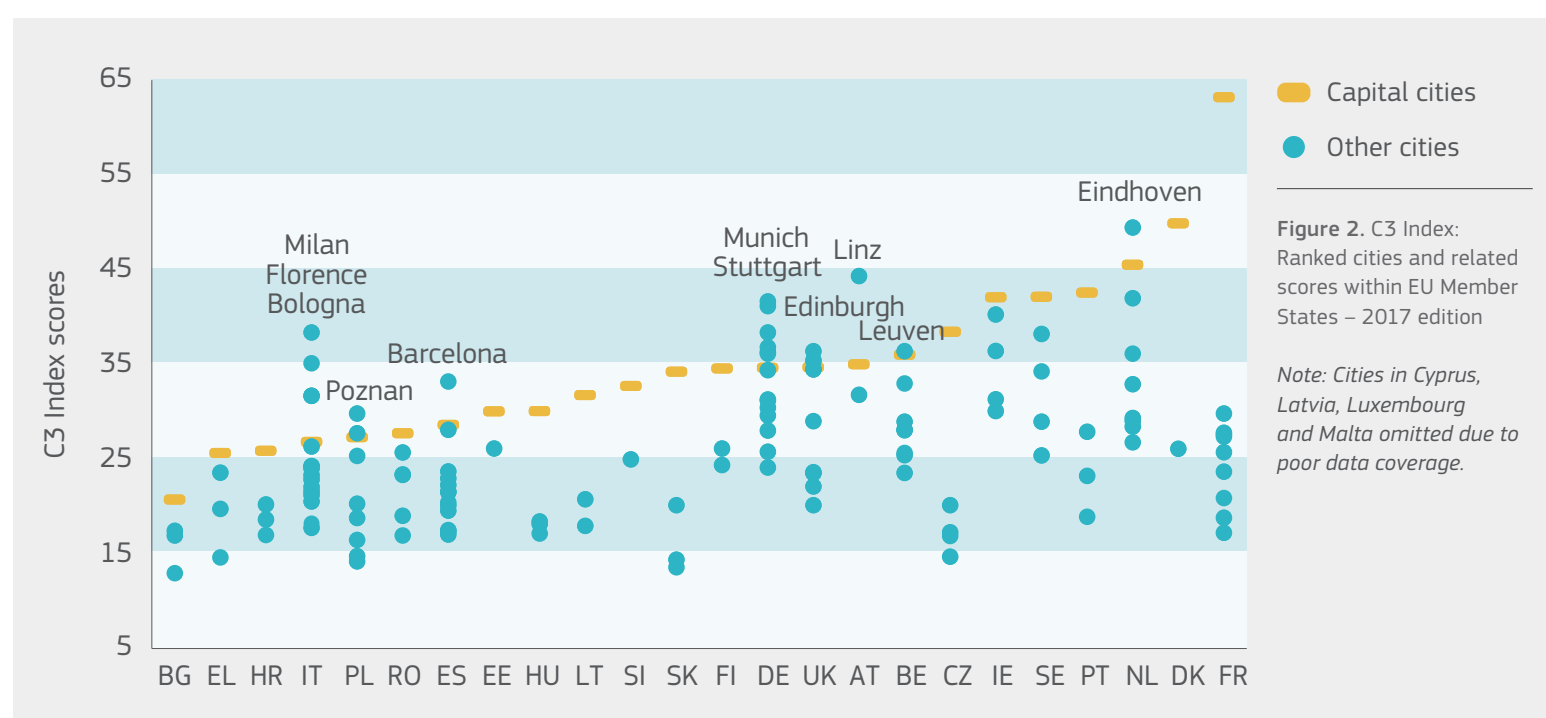
- European Capitals of Culture
- UNESCO Creative Cities
- 'Festival Cities'

Figure 1. The Cultural and Creative Cities Monitor's 168 selected cities – 2017 edition



Capitals fly high... but not always the highest

Overall, **capitals tend to be the best performing cities** on culture and creativity measured by the C3 Index⁶ in their respective countries. However, contrary to what one might expect, **eight** countries out of 24 are **exceptions**, with non-capital cities outperforming the official capitals of their respective EU Member State: Austria, Belgium, Germany, Italy, the Netherlands, Poland, Spain, and the UK. In most cases, the leading cities count fewer than 500 000 inhabitants (Linz, Leuven, Bologna, Florence, Eindhoven, Poznan and Edinburgh). One possible explanation for this result may be the expression of the indicators in per capita terms. This approach is primarily intended to enable cross-city comparability but also rewards more 'inclusive' cities which have more cultural and creative assets per inhabitant.



⁶ The C3 Index score is the weighted average of the 'Cultural Vibrancy' (40 %), 'Creative Economy' (40 %) and 'Enabling Environment' (20 %) sub-index scores.

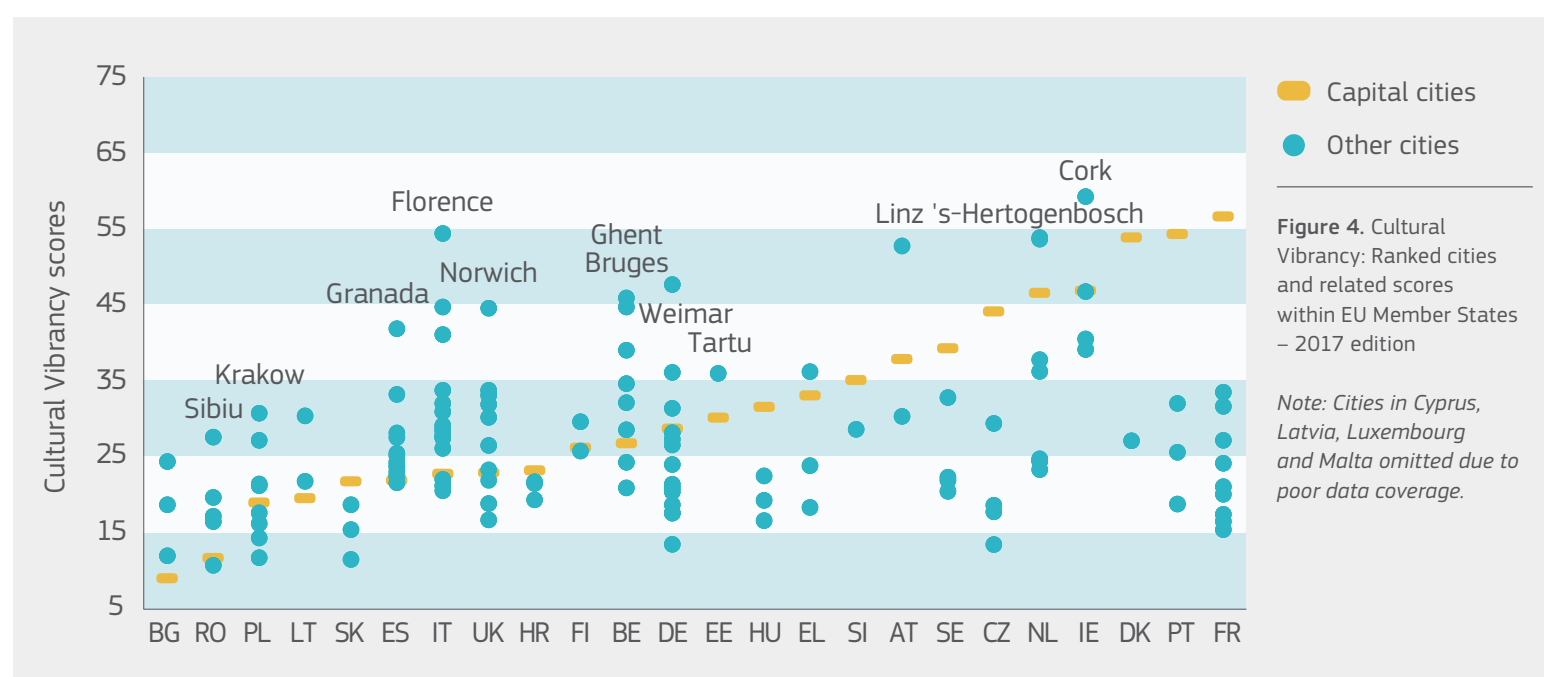


Medium-sized cities outperform capitals on cultural vibrancy

If we look at the different 'components' of the C3 Index, it is clear that **non-capital cities are particularly well positioned on 'Cultural Vibrancy'**⁷: in fifteen countries, non-capital cities mostly medium-sized outperform capitals. The analysis of the indicators underlying 'Cultural Vibrancy' shows that these outperforming cities are particularly rich in terms of cultural sites, events and/or visitors per inhabitant. Cork (IE), for instance, obtains the maximum score (100) on both Concerts & Shows and Cinema attendance which correspond to around 12 concerts per 100 000 inhabitants and 10 700 cinema tickets sold for every 1 000 inhabitants; Ghent (BE) comes first on Theatres (100) with 12 theatres for every 100 000 inhabitants; while Florence (IT) comes close to the maximum score on Museums (91.9/100) meaning that it hosts 30 museums for every 100 000 inhabitants⁸.

The polycentric pattern of 'Cultural Vibrancy', with strong capitals and non-capital cities in many parts of Europe, is particularly encouraging in terms of the power of smaller or more peripheral areas of Europe to attract and retain educated and creative individuals. These inhabitants are key to capacity building and can foster innovation, economic growth and strengthen resilience should a city face or recover from challenging circumstances. According to recent literature⁹, in a post-industrial economy, highly skilled individuals seem in fact to prefer locations with better education, heritage, arts, and natural amenities (e.g. green areas).

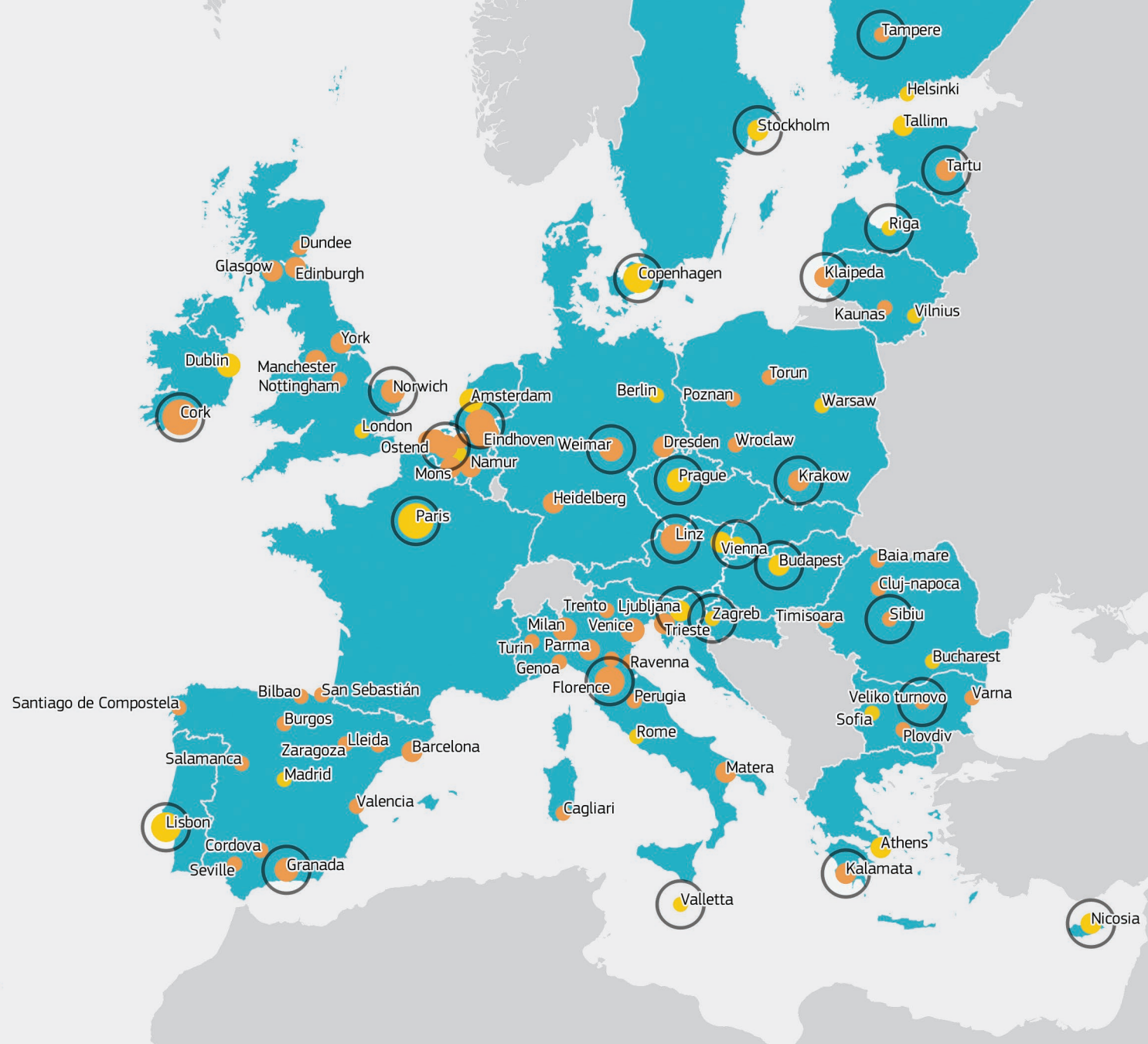
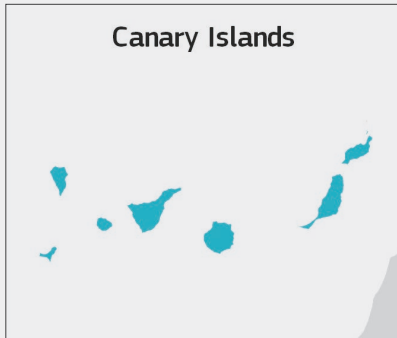
Interestingly, these results also suggest that cultural assets relating to different fields (e.g. music, cinema, theatre or heritage) contribute to 'diversely' vibrant cultural cities across Europe. Such diversity can help cities learn from each other about how to pro-actively invest in arts and cultural sectors that have different characteristics (e.g. in terms of business models, audiences, etc.) to help increase cities' appeal and attractiveness towards creative talents and investments.



⁷ The 'Cultural Vibrancy' sub-index is the weighted average of two dimensions that capture elements of the 'cultural pulse' of cities: D1.1 Cultural Venues & Facilities (50 %) and D1.2 Cultural Participation & Attractiveness (50 %).

⁸ Indicators have been gathered from the most up-to-date datasets available, with data selected from 2010 to 2015 for each city.

⁹ See, for instance, Backman, M. and Nilsson, P. (2016). The role of cultural heritage in attracting skilled individuals, *Journal of Cultural Economics*, 1-28; Nelson, A. C., Dawkins, C. J., Ganning, J. P., Kittrell, K. G., and Ewing, R. (2015). The Association Between Professional Performing Arts and Knowledge Class Growth: Implications for Metropolitan Economic Development, *Economic Development Quarterly*, 1-11; Clark, T. N., Lloyd, R., Wong, K. K. & Jain, P. (2002). Amenities drive urban growth. *Journal of Urban Affairs* (24), 493-515.

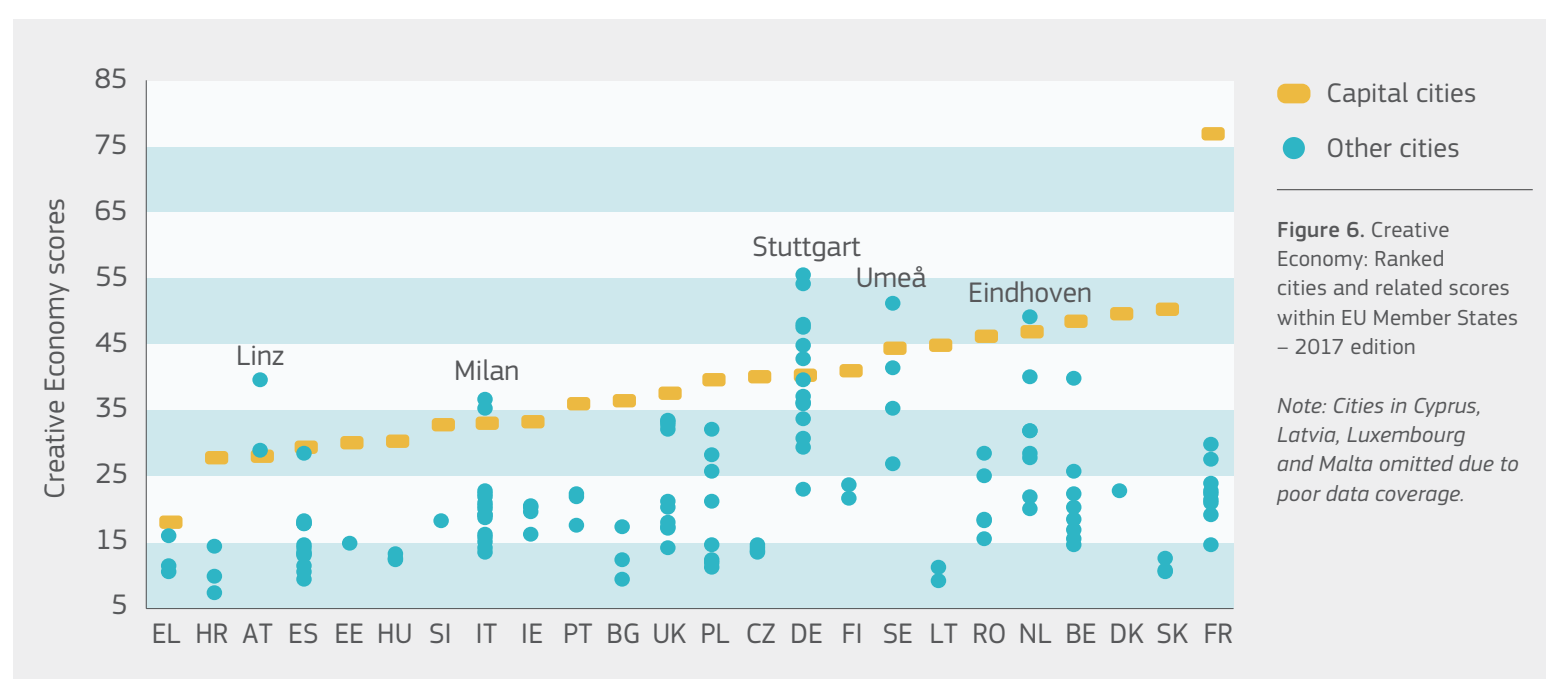


● Up to 30 ● 30 - 40 ● 40 - 50 ● 50 - 55 ● Above 55 ○ Top-ranking city in the Country

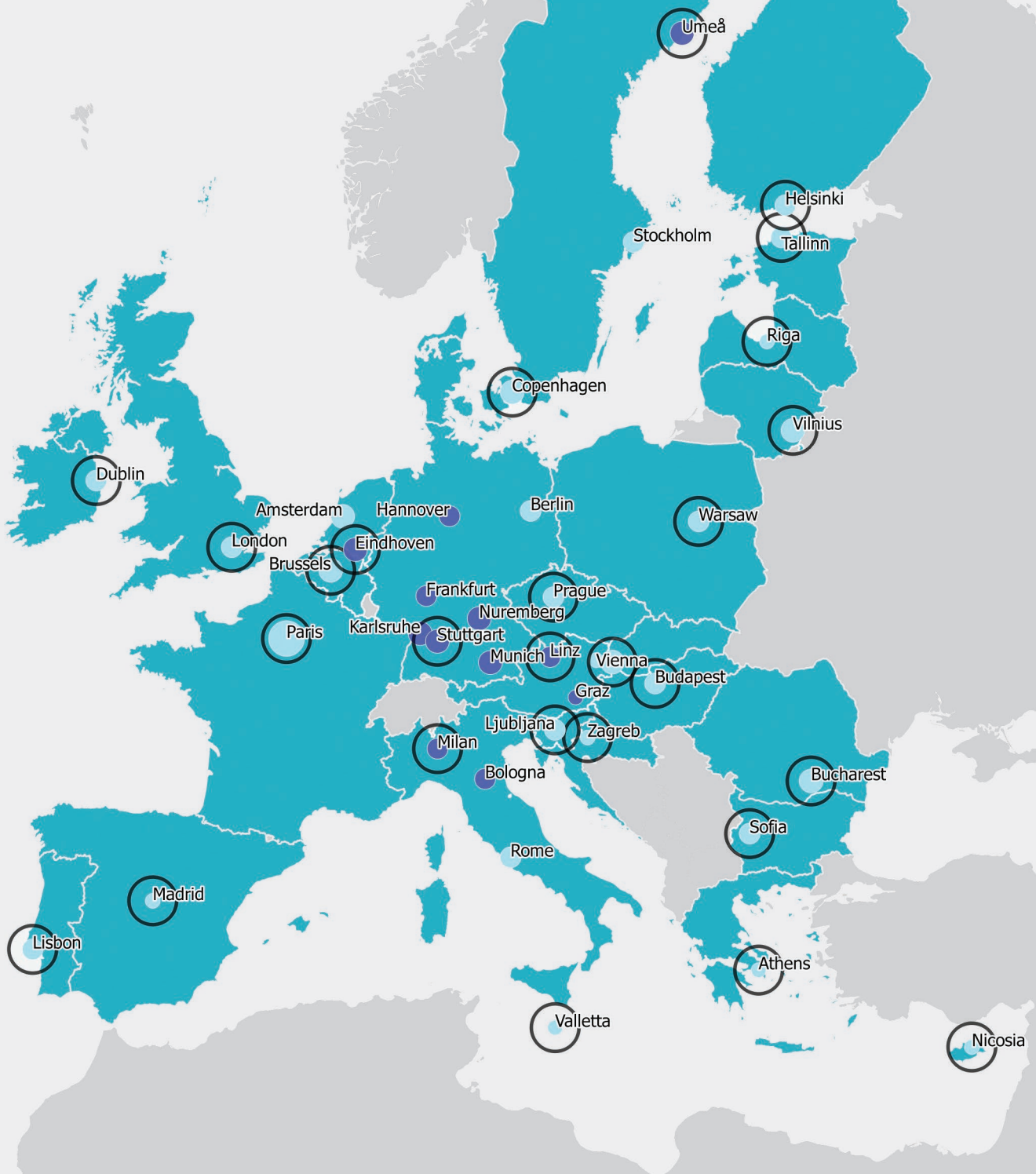
● National capital ● Cities outperforming the capital

The creative economy is led by capital cities

However, if we consider the scores on ‘Creative Economy’¹⁰, capital cities perform considerably better, with the sole exceptions being Austria, Germany, Italy, the Netherlands and Sweden. Diverse economic, political or historical reasons may help explain these results. In Italy, for instance, Milan has historically been the economic, industrial and financial capital, not to mention its pivotal role in the development of Italian design which stems in part from the excellent universities and schools such as Politecnico di Milano (engineering, architecture and design) and Istituto Marangoni (fashion). Today, Milan is also a major creative economy hub, where internationally renowned events take place every year to further fuel its creative growth, such as the Milan Fashion Week and the Milan Salone del Mobile (Furniture Fair) with the connected outdoor initiative, Fuori Salone, to mention just a few. In Germany, many cities outperform Berlin, which may be due to Berlin’s relatively short history as the capital of a reunited Germany, as well as to the high degree of decentralisation in the German federal state, which gives regions and cities greater powers compared to other European countries. In Sweden, Umeå’s first position is explained by the incredibly fast growth of its creative economy: while the number of cultural and creative jobs in the city is indeed still below its peers’ average, the city obtains the maximum score (100) on the annual number of jobs created. In the Netherlands, Eindhoven is particularly strong on innovation outputs (score: 100) compared to the capital, Amsterdam, most likely due to its renowned and prolific high tech- and design-led environment. In Austria, Linz conquers the first place thanks to its very high share of cultural and creative jobs per capita, but it is the capital city of Vienna that registers better job creation in the creative economy.



¹⁰ The ‘Creative Economy’ sub-index is the weighted average of three dimensions that show how well cities are doing in terms of: D2.1 Creative and Knowledge-based Jobs (40 %), D2.2 Intellectual Property & Innovation (20 %), and D2.3 New Jobs in Creative Sectors (40 %).



Creative Economy score

- Up to 30
- 30 - 45
- 45 - 60
- 60 - 75
- Above 75
- Top-ranking city in the Country
- National capital
- Cities outperforming the capital

Figure 7. Creative Economy: Top-ranking city in EU Member States – 2017 edition



The data also show that the gap between the capital and other cities is relatively wide in certain countries, for example, the Czech Republic, France, Lithuania and Slovakia. This finding might be explained by the fact that cultural and creative sectors benefit from agglomeration advantages which may be more prominent in capital cities, where more people and economic activities are usually concentrated compared to non-capital cities. According to the large body of literature on the agglomeration economies¹¹, this spatial concentration would in fact help companies find specialized skills, lower the transport costs or lead to knowledge transfers and mutual learning. However, a significant gap between the capital and the rest of the country's cities could be a cause for concern, as it may signify a capital city under stress and/or under-exploitation of cultural and creative resources in other cities. Investing in the attractiveness of non-capital cities with a view to generate new spatial agglomerations and benefits beyond capitals could bring equity gains at national level. National policies in various domains, which can go from culture, innovation, research and development, education and skills to transport and connectivity, have a role to play in this sense as they have major impact upon the appeal and relative performance of cities across the country.

¹¹ For instance, Combes, P.P. & Gobillon, L. (2015). The empirics of agglomeration economies, in Duranton, G., Henderson, J.V. & Strange, W. C. (eds), *Handbook of Regional and Urban Economics*, 5, Amsterdam: Elsevier, Chapter 5, pp. 247–348.

List of the selected cities

CNTRY	CITY	POP	CNTRY	CITY	POP	CNTRY	CITY	POP	CNTRY	CITY	POP	CNTRY	CITY	POP
AT	Graz	L	FR	Paris	XXL	NO	Stavanger	S-M	HU	Stavanger	XXL	ES	Lleida	S-M
AT	Linz	S-M	FR	Lyon	XXL	PL	Warsaw	XXL	IT	Warsaw	XXL	FI	Tampere	S-M
BE	Brussels	XXL	FR	Toulouse	XL	PL	Kraków	XL	IT	Kraków	XL	FR	Nantes	XL
BE	Antwerp	XL	FR	Bordeaux	XL	PL	Wrocław	XL	IT	Wrocław	S-M	FR	Montpellier	L
BE	Bruges	S-M	FR	Lille	XXL	PL	Gdańsk	L	LT	Gdańsk	L	HR	Zagreb	XL
BE	Mons	S-M	FR	Avignon	S-M	PL	Lublin	L	SI	Ljubljana	L	HR	Split	S-M
BG	Sofia	XXL	FR	Marseille	XXL	PL	Katowice	L	UK	Bradford	XL	HU	Szeged	S-M
BG	Plovdiv	L	HR	Rijeka	S-M	PT	Lisbon	XL	UK	Edinburgh	L	HU	Győr	S-M
BG	Varna	L	HR	Osijek	S-M	PT	Porto	S-M	UK	Nottingham	L	IT	Milan	XXL
BG	Veliko Turnovo	S-M	HU	Pécs	S-M	PT	Guimarães	S-M	UK	York	S-M	IT	Naples	XL
CY	Nicosia	S-M	IE	Dublin	XL	RO	Bucharest	XXL	UK	Dundee	S-M	IT	Venice	L
CZ	Prague	XXL	IE	Cork	S-M	RO	Cluj-Napoca	L	UK	Norwich	S-M	IT	Trento	S-M
CZ	Ostrava	L	IE	Limerick	S-M	RO	Timișoara	L	AT	Vienna	XXL	IT	Trieste	S-M
CZ	Pilsen	S-M	IE	Galway	S-M	RO	Sibiu	S-M	BE	Liège	L	IT	Brescia	S-M
DE	Berlin	XXL	IE	Waterford	S-M	RO	Baia Mare	S-M	BE	Namur	S-M	LT	Klaipeda	S-M
DE	Essen	XL	IT	Genoa	XL	SE	Stockholm	XL	BE	Leuven	S-M	NL	The Hague	XL
DE	Weimar	S-M	IT	Florence	L	SE	Umeå	S-M	BE	Ostend	S-M	NL	Utrecht	L
DK	Copenhagen	XL	IT	Bologna	L	SE	Lund	S-M	CH	Zurich	L	NL	Groningen	S-M
DK	Aarhus	L	IT	Perugia	S-M	SI	Maribor	S-M	CH	Geneva	S-M	NL	's-Hertogenbosch	S-M
EE	Tallinn	L	IT	Cagliari	S-M	SK	Košice	S-M	CH	Basel	S-M	NL	Leiden	S-M
EL	Athens	XL	IT	Lecce	S-M	SK	Nitra	S-M	CH	Bern	S-M	NO	Oslo	XL
EL	Thessaloniki	L	IT	Matera	S-M	SK	Prešov	S-M	CY	Limassol	S-M	PL	Łódź	XL
EL	Patras	S-M	IT	Ravenna	S-M	UK	Glasgow	XL	CZ	Brno	L	PL	Poznań	XL
EL	Kalamata	S-M	LT	Vilnius	XL	UK	Liverpool	L	CZ	Karlovy Vary	S-M	PL	Toruń	S-M
ES	Madrid	XXL	LU	Luxembourg	S-M	BE	Ghent	L	DE	Hamburg	XXL	PT	Coimbra	S-M
ES	Zaragoza	XL	LV	Riga	XL	DE	Hannover	XL	DE	Munich	XXL	RO	Iasi	L
ES	Las Palmas	L	LV	Liepāja	S-M	DE	Mannheim	L	DE	Cologne	XXL	SE	Gothenburg	XL
ES	Santiago	S-M	ES	Valletta	S-M	DE	Heidelberg	S-M	DE	Frankfurt	XL	SE	Malmö	L
ES	Cordoba	L	ES	Amsterdam	L	EE	Tartu	S-M	DE	Stuttgart	XL	SK	Bratislava	L
ES	San Seb.-Donostia	S-M	ES	Rotterdam	XL	ES	Barcelona	XXL	DE	Dresden	XL	UK	London	XXL
ES	Burgos	S-M	ES	Eindhoven	S-M	ES	Seville	XL	DE	Nuremberg	L	UK	Birmingham	XXL
ES	Salamanca	S-M	ES	Leeuwarden	S-M	ES	Bilbao	L	DE	Bochum	L	UK	Manchester	XL
FI	Helsinki	XL	FI	Maastricht	S-M	ES	Granada	S-M	DE	Karlsruhe	L	DE	Karlsruhe	L
FI	Turku	S-M	FI	Bergen	L	FR	Saint-Etienne	L	ES	Valencia	XL	ES	Valencia	XL

Legend

Selection criterion 1 - European Capital of Culture	Selection criterion 2 - UNESCO	Selection criterion 3 - Festival
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