What does Brexit mean for UK cultural and creative cities?

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Abstract

Cultural and creative sectors (CCS) are increasingly recognized as a driving economic force. In addition to their undisputed soft power, creative jobs are expected to prove more resilient to automation, and may therefore play an important role in the future growth cycles of advanced global economies. But how is Brexit going to affect the UK's flourishing creative economy at an urban level? Pre-Brexit evidence from the European Commission's Cultural and Creative Cities Monitor (CCCM) clearly shows that UK cultural and creative cities excel in Europe in their capacity to attract and integrate foreign creative professionals. Creative non-nationals represent a diverse, crucial human capital pool for CCS, as 22% of CCS employers hire at least one non-UK worker. The effect of Brexit on the cultural and creative potential of UK cities can be devastating for CCS competitiveness if not properly addressed. As CCSs are widely regarded as leading sectors of the UK economy and major drivers of innovation and growth in the UK's long-term developmental vision, suitable policy measures should be taken to prevent this possibility.

Keywords

Attraction of creative professionals, Brexit, Cultural and Creative Cities Monitor (CCCM), cultural and creative industries, culture and growth

Introduction

Since the release of the first creative industries mapping in 1998 (UK Government, 1998), the UK has strongly supported the development of its cultural and creative sectors, also as a means of promotion of the UK's global soft power. This key step toward the formulation of a fully-fledged national creative industries policy was the mature fruit of the 'Cool Britannia' period of growing attractiveness and visibility of the UK's culture throughout most of the 1990s.

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As a long-term result of such a policy breakthrough, the creative industries have currently acquired a central role in the Government's new Industrial Strategy (HM Government, 2017), as well as in the economic strategies of regional and local governments (e.g. Department for the Economy NI, 2017; Greater London Authority, 2018; HM Government, 2019; Scottish Government, 2015, 2019; Welsh Government, 2017), also in view of the documented resilience of creative jobs to automation (Bakhshi et al., 2015). The Sector Deal signed between the Creative Industries Council and the Government aims to make 'Britain the best place in the world for the creative industries to thrive' by unlocking over £150M in investment to sustain growth and generate an additional 600,000 new jobs in the creative economy by 2023 (HM Government, 2018). The national government has set up specific measures as a response to the devastating socio-economic effects of the COVID-19 pandemic on CCS jobs and revenues (UK Parliament, 2020), and has recently mobilized an additional £1.57 billion support package to protect Britain's world-class cultural, arts and heritage institutions.

However, looking beyond the current emergency, how is Brexit going to affect the UK's creative economy in the medium–long term?

To answer this question, we make use of the rich comparative evidence base provided by the Cultural and Creative Cities Monitor (CCCM) developed by the European Commission's Joint Research Centre, one of the most suitable analytical tools available for our purposes at the urban scale within the European scenario.

The Cultural and Creative Cities Monitor (CCCM) to assess the potential effects of Brexit on urban areas

CCCM is a novel benchmarking tool developed by the Joint Research Centre, the in-house research centre of the European Commission. Its objective is to support the development of evidence-based policies by providing policy makers and researchers with 29 culture-specific indicators for 190 cities in 30 European countries (EU27 plus Norway,

Switzerland and the UK) which have been selected using three internationally comparable criteria.[1] This tool enables a comparative analysis of the creative economies of a number of European cities while keeping into account their specific socio-economic features. Specifically, the Monitor makes it possible to identify actual strengths and areas of possible further development across peer groups of cities with comparable populations, income levels and employment rates. Comparisons can be carried out for each of the 29 single indicators, but also at higher aggregate levels, as obtained by means of weighted averages (Table 1), namely: nine dimensions, three sub-indices, and an overall index (for methodological details see Montalto et al., 2019a, 2019b).

The Monitor's dimensions measure nine major policy-relevant areas in a culture-led development perspective: Cultural Venues and Facilities; Cultural Participation and Attractiveness; Creative and Knowledge-based Jobs; Intellectual Property and Innovation; New Jobs in Creative Sectors; Education and Human Capital; Openness, Tolerance and Trust; Local and International Connections; and Quality of Governance.

The Cultural Vibrancy sub-index measures a city's endowment of cultural infrastructure and its capacity to attract audiences. The Creative Economy sub-index assesses urban creative economies in terms of key indicators such as cultural and creative jobs, patents and new designs. The Enabling Environment sub-index gauges the incidence of a number of tangible and intangible assets whose nature is not strictly cultural, but that strongly facilitate a city's dynamic positioning as a cultural and creative hub.
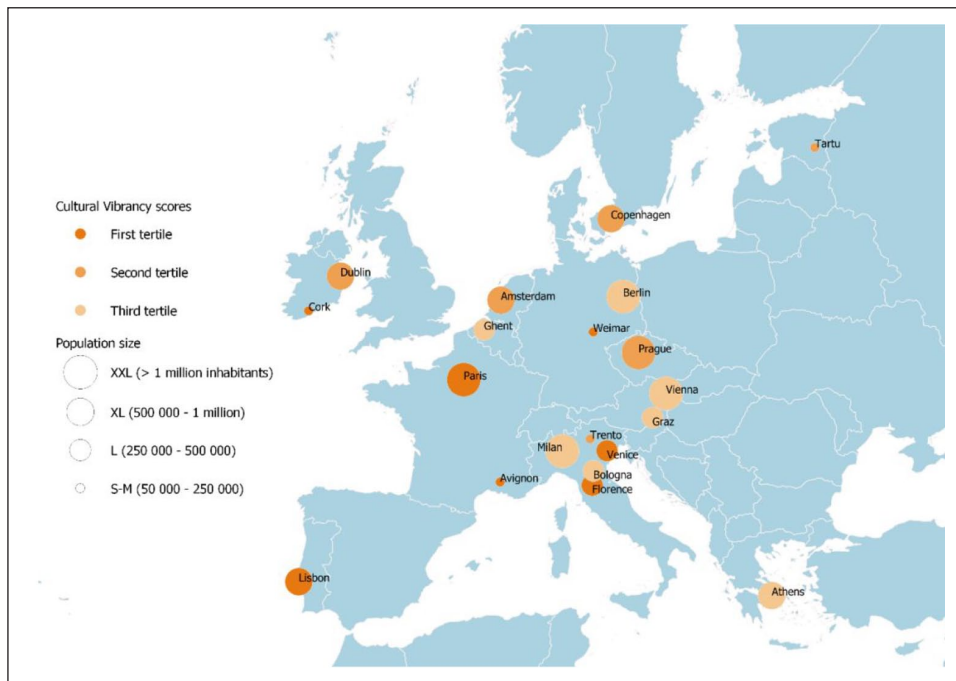
The Cultural and Creative Cities (C3) Index completes the Monitor's multi-level conceptual structure by providing an overall synthetic measure of a city's cultural and creative performance.

The dimensions, sub-indices and the C3 Index are all measured on a 0–100 increasing scale.

The CCCM sheds light on the areas of relative excellence of the 14 UK cultural and creative cities included, as compared with their European counterparts, offering insights on the possible effects of Brexit on the UK's cultural and creative potential.

Table 1. The Cultural and Creative Cities Monitor (CCCM) 2017: conceptual framework, indicators and weights.

Sub-index weights (1)	Sub-index	Dimension weights (2)	Dimensions	Rescaled dimension weights = (1) × (2)	Indicators
40%	1. Cultural Vibrancy	50%	D1.1 Cultural Venues and Facilities	20%	1. Sights and landmarks 2. Museums 3. Cinema seats 4. Concerts and shows 5. Theatres
		50%	D1.2 Cultural Participation and Attractiveness	20%	6. Tourist overnight stays 7. Museum visitors 8. Cinema attendance 9. Satisfaction with cultural facilities
40%	2. Creative Economy	40%	D2.1 Creative and Knowledge-based Jobs	16%	10. Jobs in arts, culture and entertainment 11. Jobs in media and communication 12. Jobs in other creative sectors
		20%	D2.2 Intellectual Property and Innovation	8%	13. ICT patent applications 14. Community design applications
		40%	D2.3 New Jobs in Creative Sectors	16%	15. Jobs in new arts, culture and entertainment enterprises 16. Jobs in new media and communication enterprises 17. Jobs in new enterprises in other creative sectors
20%	3. Enabling Environment	40%	D3.1 Human Capital and Education	8%	18. Graduates in arts and humanities 19. Graduates in ICT 20. Average appearances in university rankings
		40%	D3.2 Openness, Tolerance and Trust	8%	21. Foreign graduates 22. Foreign-born population 23. Tolerance of foreigners 24. Integration of foreigners 25. People trust
		15%	D3.3 Local and International Connections	3%	26. Passenger flights 27. Potential road accessibility 28. Direct trains to other cities
		5%	D3.4 Quality of Governance	1%	29. Quality of governance

Figure 1. Top 20 cultural and creative cities for 'Cultural Vibrancy' by population groups.
Source: Own elaboration from the Cultural and Creative Cities Monitor (CCCM), 2019 edition – European Commission, Joint Research Centre.
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Relative performance patterns of UK cultural and creative cities

Building on the peer-cities comparisons enabled by the CCCM, we zoom in on the top-performing European cities included in the Monitor for specific categories, starting from city rankings by population groups. These include 20 cities with more than 1M inhabitants (XXL), 40 cities between 500k and 1M (XL), 40 cities between 250k and 500k (L), and 79 cities between 50k and 250k (S-M).[2]

Interestingly enough, the 14 UK cities included in the CCCM are absent from the Cultural Vibrancy and Creative Economy Top 20 rankings (5*4 population groups) – except for London which excels in Creative Economy among the most populated cities (Figures 1 and 2).

Yet, UK cities clearly dominate the rankings when it comes to Enabling Environment (Figure 3): nine of the top 20 cities that stand out in providing a favourable environment for culture and creativity are located in the UK.

Even more interestingly, it is the policy dimension D3.2 Openness, Tolerance and Trust that provides the most contribution to the UK's dominance (Figure 4): here, 11 UK cities sit in the Top 20 ranking, with London, Glasgow, Brighton and Hove, and Norwich obtaining the first position in each of the four population groups, respectively. This partly depends on the CCCM's weights structure, that gives more prominence to this dimension (together with D3.1 Human Capital and Education) as compared with D3.3 Local and International Connections and D3.4 Quality of Governance. Still, this result is also intrinsically determined by the UK cities' comparatively superior capacity to attract and integrate foreign creative professionals, as suggested by their high scores on the underlying diversity and tolerance indicators (at least 52/100 for nearly all Top 20 UK cities on dimension D3.2 Openness, Tolerance and Trust, see Table 2).
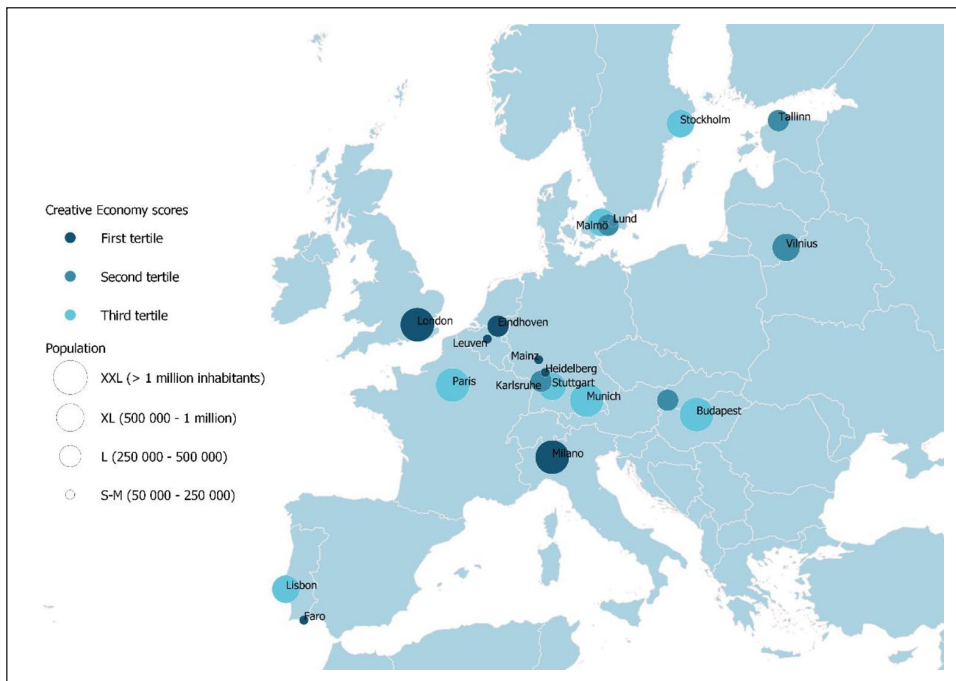
Figure 2. Top 20 cultural and creative cities for 'Creative Economy' by population groups.
Source: Own elaboration from the Cultural and Creative Cities Monitor (CCCM), 2019 edition – European Commission, Joint Research Centre.
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In addition, the results are robust to different modelling assumptions, meaning that even under different weighting schemes, UK cities remain in the Top 20 in these rankings, as proven by the small 95% confidence intervals under different simulated scenarios (Table 3). Norwich is the only exception as it could move according to cases between the second and sixth position (for more details see Montalto et al., 2019a, Annex C).

These results are particularly robust for London, Glasgow and Manchester, that have 100% data coverage on dimension D3.2, while some caution is due for the remaining UK cities in the Top 20, for which the three tolerance, integration and trust indicators used in the Monitor have been estimated based on the average of London's, Glasgow's and Manchester's values. Still, it remains clear that the UK is extremely well positioned when it comes to the capacity to attract a culturally diverse population of qualified professionals (here proxied by Foreign graduates and

Foreign-born population indicators): all UK cities have 100% data coverage on these indicators, with a median score of 71 on Foreign graduates.[3]

The positive effect of diversity is especially evident for London, which is also in the Top 20 for Creative Economy, but other cities also fare well. Manchester and Leeds, for instance, rank 13th and 14th among the 40 ranked XL cities, while Bristol, and Brighton and Hove come just after the Creative Economy Top 5 cities in the L group, occupying the sixth and seventh positions, respectively, out of 40 cities in the L category.

UK cultural and creative cities in a post-Brexit scenario: discussion

As UK cities uniquely excel in their capacity to attract a diverse pool of creative professionals, students and workers, Brexit might have a devastating effect on UK cultural and creative cities' competitive
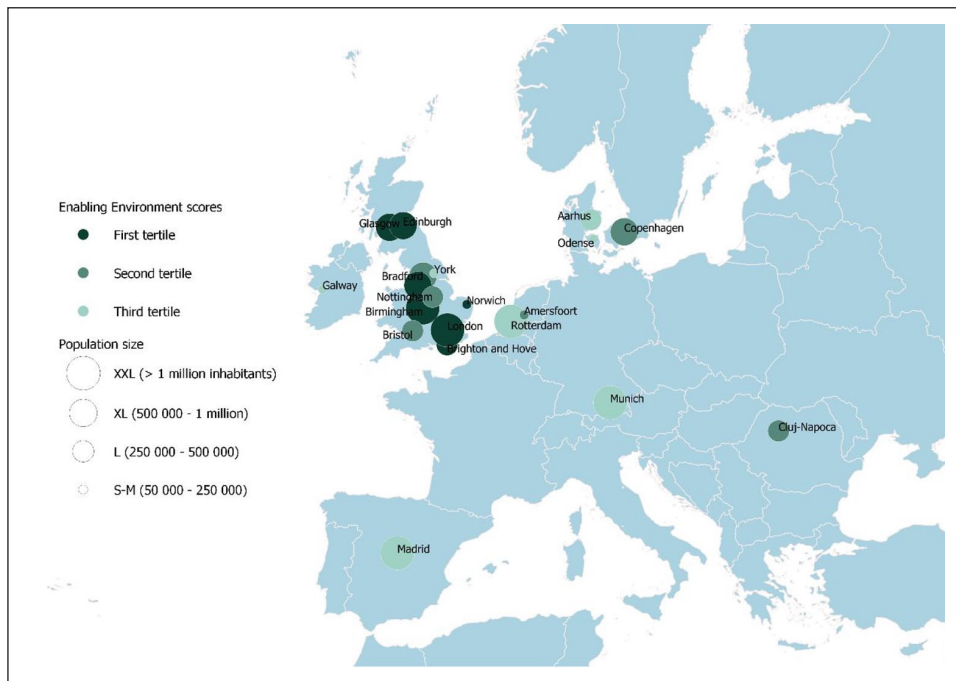
Figure 3. Top 20 cultural and creative cities for 'Enabling Environment' by population groups.
Source: Own elaboration from the Cultural and Creative Cities Monitor (CCCM), 2019 edition – European Commission, Joint Research Centre.
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capacity if an increasingly restrictive policy of admissions of foreigners as long-term residents is put in place as sometimes announced. This would clearly reflect in a dramatic drop of those CCCM indicators that are quintessential in determining the current high-profile positioning of UK cities as thriving cultural and creative hubs in all urban size categories. The often emphasized intention of focusing immigration restrictions upon low-skilled workers, while still relying on the attraction of high-skilled ones, would only partially solve the problem. In the creative fields it is often hard to prove one's professional potential by means of educational titles and qualifications, and even professional achievements are often difficult to certify in ways that can be fully appreciated by non-insiders. This is especially true for young creative talents, whose profile from the point of view of immigration criteria could be easily confounded with that of the typical low-skill worker,

also in view of the fact that they often earn a living in their early career stages by accepting low-paid, low-skill 'day jobs'.

Such considerations leave room for concern, also in view of the fact that national-level evidence shows that creative businesses turn to migrant labour to access skills or talents not available in the UK workforce. Using the data collected by the Migration and Skills Statistics sub-group of the Creative Industries Council's (CIC) Technical Working Group, a recent report (Bakhshi and Spilsbury, 2019) finds that, in January 2018, 22% of employers in the creative industries hired at least one non-UK worker. The share of employers relying on foreign workforce is particularly high for larger establishments – with 79% employing a non-UK worker compared with only 13% of the smallest – as well as for some sub-sectors, notably architecture (32%), design and crafts (32%), and creative ICT
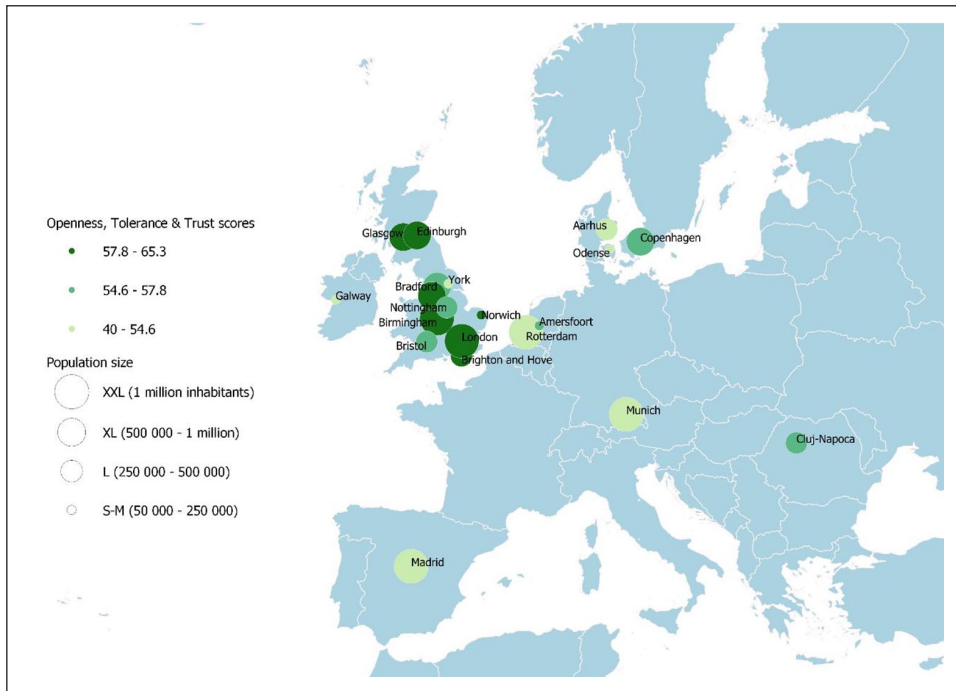
Figure 4. Top 20 cultural and creative cities for D3.2 Openness, Tolerance and Trust by population groups.
Source: Own elaboration from the Cultural and Creative Cities Monitor (CCCM), 2019 edition – European Commission, Joint Research Centre.
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and games (25%). Not surprisingly, in London, 52% of creative businesses employed at least one non-UK worker. Moreover, the UK's capacity to attract and employ foreign creative talent is not only beneficial to the UK's creative economy in the strict sense, as businesses from all kinds of sectors seek a wide range of (immigrant) creative skills (Easton and Djumalieva, 2018).

But in the new Brexit scenario, it is legitimate to ask to what extent UK cities will still be able to find those skills that are not easily found in local labour markets. Due to the vital role that international talent plays as part of the creative workforce (see also Carey et al., 2019), and in the light of evidence that non-UK nationals have already started moving away in anticipation of Brexit (Advertising Association, 2018; Royal Institute of British Architects (RIBA), 2019; Work Foundation / ScreenSkills, 2019), many industry stakeholders have expressed their doubts about UK's new immigration guidelines (Creative

Industries Federation, 2017; Miles, 2006; Scottish Government, 2019; UKIE, 2017). Cities, too, have voiced their preoccupation: in Birmingham, for instance, the recruitment of skilled employees may be particularly problematic for its vibrant live music sector in the post-Brexit era (Rozbicka et al., 2019).

The above remarks do not even consider the possible indirect effects of Brexit on CCS's future competitiveness, such as Brexit's reputational soft power damage to the UK as a welcoming, inclusive country, or the likely medium-term decrease of international tourism flows (further exacerbated by the pandemic crisis), particularly relevant for eventful creative cities such as Edinburgh.

Conclusions

The UK vote to leave the European Union is going to disrupt the Union as we have known it. The long-term scale and shape of the impact of Brexit are not

Table 2. Top 20 cultural and creative cities for D3.2 Openness, Tolerance and Trust by population groups and scores.

D3.2 Openness, Tolerance and Trust – Top 20 cities by population group							
Ranks for XXL cities	Country	City	Score (0–100 scale)	Ranks for L cities	Country	City	Score (0–100 scale)
1	UK	**London**	64.49	1	UK	**Brighton and Hove**	57.78
2	UK	**Birmingham**	57.98	2	UK	**Nottingham**	57.71
3	DE	Munich	49.74	3	RO	Cluj-Napoca	55.9
4	ES	Madrid	40.94	4	UK	**Bristol**	55.82
5	NL	Rotterdam	40	5	DK	Aarhus	54.35
Ranks for XL cities	Country	City	Score (0–100 scale)	Ranks for S-M cities	Country	City	Score (0–100 scale)
1	UK	**Glasgow**	65.26	1	UK	**Norwich**	60.58
2	UK	**Edinburgh**	63.56	2	NL	Amersfoort	56.37
3	UK	**Manchester**	59.21	3	IE	Galway	52.62
4	UK	**Bradford**	55.56	4	DK	Odense	52.51
5	DK	Copenhagen	55.14	5	UK	**York**	52.32

Note: S-M = cities between 50k and 250k inhabitants; L = cities between 250k and 500k inhabitants; XL = cities between 500k and 1M inhabitants; XXL = cities with more than 1M inhabitants.
Source: Own elaboration from the Cultural and Creative Cities Monitor (CCCM), 2019 edition – European Commission's Joint Research Centre.
In bold, UK cities.

entirely clear to date, but the movement of people, products and services is certainly going to be affected, placing an important burden on the shoulders of the UK's flourishing creative economy, which sums up to the disruption caused by the pandemic crisis.

Evidence is very clear about the role of foreign workforce in the UK economic ecosystem. Migrant workers (particularly highly skilled ones) are central to the cultural and creative sectors – which in many policy documents by national, regional and local governments are clearly pointed out as major drivers of the UK's economic innovation and growth in future years.

In this brief commentary, making use of the European Commission's CCCM tool, we have shown that the UK cultural and creative cities are extremely well positioned when it comes to attracting and integrating culturally diverse creative professionals. There is no such country in Europe that boasts a comparable number of cities that excel in this respect. The positive effect of this capacity is particularly evident for London, which is also in the Top 20 for Creative Economy, but other cities such as Manchester, Leeds, Bristol, and Brighton and Hove, also perform very well.

The new immigration rules in the post-Brexit scenario should take into account that such a diverse workforce is crucial for sectors such as the cultural and creative ones, that strongly rely on foreign talent, as national-level data show. Relying on the fact that future immigration policies will still prioritize the attraction of highly-skilled immigrants, as it is often claimed, might be delusional. Creative talent may take many different forms, and educational qualifications or other formal titles and certifications often work poorly as quality filters in these fields. If this evidence, and the issues that it raises, are not sufficiently considered to inform future policy action, the UK creative industries' growth prospects are at risk of an unnecessary and possibly serious curtailment.

Table 3. Top 20 cultural and creative cities for 'Enabling Environment' by population groups and confidence intervals.

Enabling Environment

Ranks for XXL cities	Country	Cities	95% confidence intervals
1	UK	**London**	[1, 3]
2	FR	Paris	[1, 4]
3	DE	Munich	[1, 4]
4	UK	**Birmingham**	[3, 5]
5	ES	Barcelona	[3, 6]

Ranks for XL cities	Country	Cities	95% confidence intervals
1	IE	Dublin	[1, 5]
2	UK	**Edinburgh**	[1, 4]
3	DK	Copenhagen	[1, 4]
4	UK	**Glasgow**	[2, 4]
5	UK	**Manchester**	[3, 5]

Ranks for L cities	Country	Cities	95% confidence intervals
1	UK	**Nottingham**	[1, 2]
2	UK	**Brighton and Hove**	[1, 3]
3	DE	Karlsruhe	[3, 5]
4	NL	Utrecht	[2, 5]
5	UK	Bristol	[3, 5]

Ranks for S-M cities	Country	Cities	95% confidence intervals
1	IE	Galway	[1, 8]
2	IE	Cork	[2, 10]
3	UK	**Norwich**	[2, 6]
4	IE	Limerick	[3, 11]
5	DE	Heidelberg	[1, 6]

Note: S-M = cities between 50k and 250k inhabitants; L = cities between 250k and 500k inhabitants; XL = cities between 500k and 1M inhabitants; XXL = cities with more than 1M inhabitants.
Source: Own elaboration from the Cultural and Creative Cities Monitor (CCCM), 2019 edition – European Commission, Joint Research Centre.
In bold, UK cities.

Declaration of conflicting interests

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Notes

1. CCCM 2019 includes 98 cities which have been or will be European Capitals of Culture (ECoCs) up

to 2019, or which have been shortlisted to become an ECoC up to 2023; 33 UNESCO Creative Cities (including the most recent winners in 2015) which do not overlap with the previous ECoC list; and 59 cities hosting at least two permanent international cultural festivals running until at least 2015.

2. The reason why the number of cities in the four population groups totals 179 instead of 190 is due to the fact that, as explained in Montalto et al. (2019a), 11 cities not meeting minimum data coverage criteria have been included in the Monitor but not in the final rankings.

3. The clear predominance of UK cultural and creative cities in 'Enabling Environment' and D3. Openness, Tolerance and Trust is confirmed also when looking at the other peer groups of cities (i.e. by income and employment), as can be seen from the CCCM's interactive online tool: https://composite-indicators. jrc.ec.europa.eu/cultural-creative-cities-monitor/ cultural-creative-cities.

References

Advertising Association (2018) Advertising Association – written evidence (ADV0019). Available at: http:// data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/communications-committee/the-advertising-industry/written/71651.html (accessed 30 October 2020).

Bakhshi H and Spilsbury M (2019) *The Migrant and Skills Needs of Creative Businesses in the United Kingdom: Findings from the January 2018 Creative Industries Council Migration and Skills Survey*. London: Creative Industries Policy and Evidence Centre. Available at: www.pec.ac.uk (accessed 30 October 2020).

Bakhshi H, Frey CB and Osborne M (2015) *Creativity Vs. Robots: The Creative Economy and the Future of Employment*. London: Nesta. Available at: www. nesta.org.uk

Carey H, Florisson R and Giles L (2019) *Skills, Talent and Diversity in the Creative Industries*. London: Creative Industries Policy and Evidence Centre. Available at: www.pec.ac.uk(accessed 30 October 2020).

Creative Industries Federation (2017) Global talent report: why the UK's world-leading creative industries need international workers and how to attract them. Available at: https://www.a-n.co.uk/research/global-talent-report-uks-world-leading-creative-industries-need-international-workers-attract/ (accessed 30 October 2020).

Department for the Economy NI (2017) A consultation on an industrial strategy for Northern Ireland. Available at: https://www.economy-ni.gov.uk/consultations/ industrial-strategy(accessed 30 October 2020).

Easton E and Djumalieva J (2018) *Creativity and the Future of Skills*. London: Creative Industries Policy and Evidence Centre. Available at: www.pec.ac.uk (accessed 30 October 2020).

Greater London Authority (2018) The Mayor's Economic Development Strategy for London. Available at: https://www.london.gov.uk/sites/default/files/economic-development-strategy-2018_1.pdf (accessed 30 October 2020).

HM Government (2017) Industrial strategy: building a Britain fit for the future. Available at: https://www. gov.uk/government/publications/industrial-strategy-building-a-britain-fit-for-the-future (accessed 30 October 2020).

HM Government (2018) Creative industries sector deal. Available at: https://www.gov.uk/government/news/ creative-industries-sector-deal-launched (accessed 30 October 2020).

HM Government (2019) Greater Manchester Local Industrial Strategy. Available at: https://www.gov. uk/government/publications/greater-manchester-local-industrial-strategy (accessed 30 October 2020).

Miles S (2006) Small city – big ideas: culture-led regeneration and the consumption of place. In: Bell D and Jayne M (eds) *Small Cities: Urban Experience Beyond the Metropolis*. London: Taylor & Francis, pp. 233–243.

Montalto V, Tacao Moura CJ, Alberti V, Saisana M and Panella F European Commission Joint Research Centre (2019a) *The Cultural and Creative Cities Monitor: 2019 edition*. Ispra: Joint Research Centre.

Montalto V, Tacao Moura CJ, Langedijk S and Saisana M (2019b) Culture counts: an empirical approach to measure the cultural and creative vitality of European cities. *Cities* 89(6): 167–185.

Royal Institute of British Architects (RIBA) (2019) Powered by people: building a post-Brexit immigration system for UK architecture. Available at: https:// www.architecture.com/knowledge-and-resources/ resources-landing-page/powered-by-people (accessed 30 October 2020).

Rozbicka P, Hamilton C, Behr A, Correa Vila P and John Davies L (2019) *Birmingham Live Music and Brexit Contents*. Aston University, Birmingham City University and Newcastle University. Available at: https://www2.aston.ac.uk/lss/research/lss-research/ aston-centre-europe/projects-grants/blmp-report-i. pdf?mc_cid=ff9bd48757&mc_eid=%5BUNIQID%5D (accessed 30 October 2020).

Scottish Government (2015) Scotland's Economic Strategy. Available at: https://www.gov.scot/publications/

scotlands-economic-strategy/pages/2/ (accessed 30 October 2020).

Scottish Government (2019) Creative industries: policy statement. Available at: https://www.gov.scot/publications/policy-statement-creative-industries/pages/2/ (accessed 30 October 2020).

UK Government (1998) Creative industries mapping documents 1998. Available at: https://www.gov.uk/government/publications/creative-industries-mapping-documents-1998 (accessed 30 October 2020).

UK Parliament (2020) Impact of COVID-19 on DCMS sectors: first report. Available at: https://publications.parliament.uk/pa/cm5801/cmselect/cmcumeds/291/29102.htm (accessed 30 October 2020).

UKIE (2017) State of play – the UK games industry's priorities for the EU negotiations | Ukie. Available at: https://ukie.org.uk/resources/state-of-play-the-uk-games-industry-s-priorities-for-the-eu-negotiations (accessed 30 October 2020).

Welsh Government (2017) Prosperity for all: economic action plan. Available at: https://gov.wales/prosperity-all-economic-action-plan (accessed 30 October 2020).

Work Foundation / ScreenSkills (2019) Skills forecasting analysis for the UK screen industries. Available at: https://www.screenskills.com/media/2854/2019-08-13-skills-foresighting-report.pdf (accessed 30 October 2020).