

<b>Institution:</b> University of Birmingham		
<b>Unit of Assessment:</b> 17, Business and Management Studies		
<b>Title of case study:</b> Building economic resilience: UK regional and national responses to Brexit and Covid-19		
<b>Period when the underpinning research was undertaken:</b> 2018-2020		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b>	<b>Role(s) (e.g. job title):</b>	<b>Period(s) employed by submitting HEI:</b>
Raquel Ortega-Argilés	Professor	2016–present
Simon Collinson	Professor	2012–present
Anne Green	Professor	2017–present
Chloe Billing	Research Fellow	2016–present
Deniz Sevinc	Research Fellow	2015–present
Rebecca Riley	Business Development Director	2015–present
Ben Brittain	Policy and Data Analyst	2019–present
Amir Qamar	Research Fellow and Lecturer	2017–present
<b>Period when the claimed impact occurred:</b> 2017-2020		
<b>Is this case study continued from a case study submitted in 2014?</b> No		
<b>1. Summary of the impact</b>  City-REDI has improved the West Midlands region's capacity to withstand the economic threats emanating from Brexit and Covid-19 through <b>shaping the West Midlands region's socio-economic policy</b> . We have (1) <b>contributed directly to the West Midlands Combined Authority's resilience plan</b> , resulting in concrete interventions, such as the workforce support package; (2) helped to <b>leverage higher than anticipated funding for the region</b> from Central Government and (3) influenced the <b>national 'levelling-up agenda' and regional development policies more generally</b> .		
<b>2. Underpinning research</b>  Brexit and Covid-19 have highlighted the need for high quality data and analysis to understand the resilience and vulnerability of UK regions to socio-economic shocks. Having the tools to understand regional vulnerability poses a challenge for regional and national policymakers, as good quality sub-national data is scarce and sometimes not fit for purpose. Understanding UK regional inequalities, vulnerabilities and projecting their consequences and necessary mitigating strategies is at the core of the research conducted at the City-Region Economic Development Institute (City-REDI) which led to £7.7m of research funding from Research England and local partners to establish the West Midlands Regional Economic Development Institute (WM REDI). WM REDI is a collaboration between City-REDI on behalf of the University of Birmingham and the West Midlands Combined Authority. By analysing the engagement of UK firms and regions in cross-border global value chains, City-REDI's research has produced more accurate projections of the effects of Brexit and Covid-19 on the UK economy than could be gained from trade statistics alone. The research has a mixed-methods approach including quantitative (datasets, input-output, econometric and CGE analyses) and qualitative case study analyses on specific regions, industries and workers.  In particular, City-REDI has coordinated and produced a series of data and analyses on the Brexit-related consequences in UK regions and industries. This work has also been supported by two ESRC-funded research projects, coordinated by Prof. Ortega-Argilés, on the post-Brexit-related risk exposure of UK and EU regions, industries and workers, and local government preparedness		

for Brexit (R1–R4; S7) and, led by Prof. Green, on likely institutional and workforce impacts on the UK construction Industry (R5).

Meanwhile, WM REDI has also provided data and analysis to shape the region's response to the economic and social impacts of the Covid-19 pandemic. The West Midlands Weekly Economic Impact Monitor (S1) provides evidence on a broad range of regional effects of Covid-19: health, labour, industry and regional economic performance measures to track the changing impacts and future scenarios to enable stakeholders to understand the combined local effects of both Brexit and Covid-19 (from March 2020 to December 2020, 39 issues were produced).

### Key Findings (KF):

**KF1.** The West Midlands is amongst the three UK regions likely to be most adversely impacted by Brexit due mainly to its relative reliance on manufacturing value chains and EU trade (R1–R4). City-REDI's results estimate that 2.64% of EU GDP is at risk due to Brexit trade-related consequences. In the UK, the Brexit trade-related consequences account for 12.2% of the UK's GDP (R1). For the West Midlands region, 12.2% of local GDP is exposed to Brexit trade-related risks. Manufacturing is the most affected local sector, with 32.2% of its local GDP exposed to Brexit, followed by Primary Industries (25.5%) and Services (8.9%) (R1).

**KF2.** Manufacturing of motor vehicles, machinery and equipment are the most affected regional sectors, with drops in their competitiveness of around 4.1% and 2.8% respectively and increases in costs of around 13.6% and 8.9%. These effects are due to these sectors' dependency on the EU via global value chains (R3). Similar calculations have been performed for the whole population of EU regions (R3).

**KF3.** Because of changes to EU immigration post-Brexit, the UK construction sector is vulnerable to skills shortages, at a time of renewed investment in physical infrastructure and house building. The UK's construction sector is reliant on flexible, migrant workers, who make up 14% of the construction workforce, a percentage that rises to 54% in London. Approaching half (41%) of EU migrant workers in construction are self-employed and vulnerable to post-Brexit immigration systems (R5).

**KF4.** The West Midlands automotive industry is particularly vulnerable to firm closures. Analyses of the financial resilience of automotive firms in the West Midlands region to respond to economic shocks demonstrate that 21 firms are at high risk due to poor current liquidity ratios, with Coventry and Birmingham emerging as locations most susceptible to firm closures. Flagship original equipment manufacturers operating at the downstream end of supply chains are particularly vulnerable. If these firms were to fail, there would be a significant destructive impact on the industry and local economy (R6; S11).

**KF5.** Covid-19 will widen interregional inequalities and accentuate the interregional effects of Brexit. In the short- to medium-term, the major effects are on sectors such as travel, tourism, hospitality, creative and cultural industries, and high street retail whereas, in the medium- to long-term, the greatest effects are likely to be on the smaller- to medium-sized firms and the real estate and re-development sector due to financial constraints (R7).

**KF6.** The Covid-19 crisis has provided a stress test for the current education and skills system. The closure of schools during lockdown brought to the fore concerns about accentuating inequalities and social mobility. Allied to this, the disruption to college and university courses, and the impact of recession on new entrants to the labour market, together with a downturn in apprenticeships, means that young people have been particularly affected. The higher-skilled have proved more resilient in the face of the shock (S1).

### Key recommendations (KR):

**KR1.** National policies will be insufficient to account for the differences in the vulnerability of regions to shock effects and their resilience prospects, so a region-specific policy approach is essential in understanding such issues (R2, R4, R7).

**KR2.** The differential impact of Covid-19 and Brexit-related changes (including in immigration policy) on different sectors and occupations means that enhancing the resilience of the skills

system is paramount in fulfilling labour and reskilling requirements for economic recovery (R5, R7).

### 3. References to the research

**R1.** Chen, W., Los, B., McCann, P., Ortega-Argilés, R., Thissen, M., van Oort, F. (2018) The Continental Divide? Economic Exposure to Brexit in Regions and Countries on both sides of the Channel, *Papers in Regional Science*, 97(1), 25–54. DOI: 10.1111/pirs.12334. *Martin Beckmann Prize 2019 – Best Paper Award in Papers in Regional Science published in 2018.*

**R2.** Billing, C., McCann, P. and Ortega-Argilés, R. (February 2019) Interregional Inequalities and UK Sub-National Governance Responses to Brexit, *Regional Studies*, 53(5), 741–760. DOI: 10.1080/00343404.2018.1554246

**R3.** Thissen, M., van Oort, F., McCann, P., Ortega-Argilés, R. and Husby, T. (2020) [The Implications of Brexit for UK and EU Regional Competitiveness](#), *Economic Geography*. DOI: 10.1080/00130095.2020.1820862

**R4.** Billing, C., McCann, P., Ortega-Argilés, R. and Sevinc, D. (2020) [UK Analysts' and Policymakers' Perspectives on Brexit: Challenges, Priorities and Opportunities for Sub-National Areas](#), *Regional Studies*. DOI: 10.1080/00343404.2020.1826039

**R5.** Green, A. (2019) [Low-skilled employment in a new immigration regime: challenges and opportunities for business transitions](#), *National Institute Economic Review*, 248, R17–R27.

**R6.** Qamar, A., Hall, M. A., Chicksand, D. and Collinson, S. (2019). Quality and flexibility performance trade-offs between lean and agile manufacturing firms in the automotive industry. *Production Planning & Control*, 31(1), 1–16. DOI: 10.1080/09537287.2019.1681534

**R7.** Bailey, B., Clark, J., Colombelli, A., Corradini, C., De Propriis, L., Derudder, B., Fratesi, U., Fritsch, M., Harrison, J., Hatfield, M., Kemeny, T., Kogler, D., Lagendijk, A., Lawton, P., Ortega-Argilés, R. and Usai, S. (2020) [“Regions in a time of pandemic”](#), *Regional Studies*. DOI: 10.1080/00343404.2020.1798611

**Research funding:** City-REDI's research knowledge on resilience, in relationship to Brexit and Covid-19, is recognised in an ESRC Brexit UKICE Network award of £27,750 (University of Birmingham lead applicant, March–May 2020) and an ESRC Brexit Priority Grant (ES/R00126X/1) of £356,266; [The West Midlands Regional Economic Development Institute](#) (WM REDI) has received £5m via a major award from Research England REF Fund.

### 4. Details of the impact

#### 1. Shaped the West Midlands Combined Authority's (WMCA) policy enabling regional resilience in response to the threats of Brexit and Covid-19

**WMCA has produced a strong resilience plan** in response to Brexit and Covid-19 threats (R1; S1). We contributed by identifying some of the worst likely impacts on the region; for example, reductions in local economic growth and competitiveness associated with value-chain disruptions due to Brexit in the most regional embedded sectors like advanced manufacturing industries (automotive and basic pharmaceutical products) or services such as business and professional services (R1, R3). We also highlighted the uneven impact of Covid-19 and Brexit in the regional skill distribution (R5, R7; S1). Through this work, we enabled local policymakers to develop regional resilience plans in response. That these plans benefited from WM REDI's work is confirmed by the Mayor of the WMCA who said “Your analysis has **improved our understanding of the region's distinctive exposure** to different kinds of risks and therefore enabled a more effective response to the disruptive effects of Brexit and Covid-19. City-REDI analysis, particularly the ‘West Midlands Weekly Economic Monitor’, has tracked the impact of Covid-19 on the various elements of our economy, **enabling members of the (Economic Impact Group) to respond to pressures across the region** [ . . . ] We were able to highlight specific areas of local risk, with evidence and data to support requests made of central government for funding and support schemes for vulnerable sectors and communities.” (S2). The Head of Economy and Local Industrial Strategy Chair attests that “[City-REDI's] analysis has improved our understanding of the region's distinctive exposure to different kinds of risks and therefore enabled a more effective

response to the disruptive effects of Brexit and Covid-19 [ . . . ] City-REDI's advice shaped the types and level of resources requested as well as the prioritisation of specific risks and remedies." (S3). This evidence and data were vital to support requests to Central Government for funding and support schemes (S1, S3, S4; R1, R2, R3, R4).

That we were successful is shown by the funding received from Central Government to support the resilience plans, specifically:

- **£1.5bn to accelerate planned infrastructure projects**, such as new tram and rail lines that inject extra money into the economy and create new jobs (S4–S5).
- **£644m fund for businesses** with cash flow issues or struggling to secure loans for investment (S5; R6).
- **£36m workforce support package** for workers made redundant, the retention and retraining of staff, and for an apprenticeship protection scheme (S5; R5).
- **£8.3m business support package** with help for exporters to access foreign markets including bespoke trade missions (S5; R1–R4).

## 2. WMCA was awarded a larger share of Central Government support funding.

**The West Midlands region was awarded approximately 50% additional funding from Central Government compared to a straightforward per-capita basis (S2).** On 3rd July 2020, the region was awarded **£66m allocation** from the national £900m Getting Building Fund (S3, S5). According to the Mayor of the West Midlands "the work of City-Redi was also pivotal in putting together the list of asks for Government support that formed our 'Recharged the West Midlands' document" (S2, S4). The region's enhanced share of this fund was calculated on the basis of the additional risk of shocks to our regional economy. The WMCA's case to Central Government was robust because of our contribution, which demonstrated the higher levels of risks to firms, jobs and communities from our unique industry sector mix, lower average skills and existing levels of inequality (R7; S5). That this award is substantially higher is attested to by the Head of Economy and Local Industrial Strategy at the WMCA, who states, "Had this fund been allocated crudely on a straight per-head basis, the region would have received circa £46 million, so this represents about a 50 per cent uplift to the region as a result of ministers' decisions to 'target in areas facing the biggest economic challenges as a result of the pandemic'" (S3). That our input was material to the success is confirmed by the Head of Economy and Local Industrial Strategy at the WMCA, who asserts "This is a result of the robust, evidence-based case which the WMCA put forward, with City-REDI analysis at its heart" (S3). Similarly, the Chair of the Greater Birmingham and Solihull Partnership said that "working in collaboration across the private, public and education sectors has secured a compelling set of high-impact investments that can deliver tangible benefits in the short and medium-term" (S4).

## 3. Contributed to the national policy design and implementation of the 'levelling-up agenda'

We have **impacted on the Whitehall's 'levelling-up' agenda in four main demonstrable ways:**

- Shaped Whitehall's thinking and action with regard to local and regional implications of all trade deals;** not just those with the EU, but with respect to other countries and parts of the world as well (S6). Using our data sets (S7), we showed the importance of analysing the interregional trade data to understand the heterogeneous resilience prospects of different UK regions as a result of the impacts of economic shocks such as Brexit (R1, R3). According to the Deputy Director at the UK Department of Business and Local Growth Analysis (BEIS), "The interregional trade data generated by your [City-REDI's] project was novel, and no similar types of data were available to BEIS or any other Whitehall department prior to your project [ . . . ] These data have been critical for helping us in Central Government to consider the regional implications of alternative trading arrangements. Moreover, the remarkable level of analysis at the sectoral and regional levels that your research provided helped us to embed consideration of these risks across Whitehall and with local partners and the quality and timeliness of the data meant that it was, and still is, in high demand [ . . . ] Indeed, the impacts of the project are greater



than this, because it **helped Whitehall as a whole to consider the local and regional implications of all trade deals more generally, not just with respect to the EU, but with respect to other countries and parts of the world as well** (R1, R3; S6, also see S7).

- ii. We have made it possible to **anticipate and mitigate any adverse trade-related effects on UK regions**, improving policy design and implementation. For the first time, our new datasets and analysis have **enabled the calculation of growth indicators at sub-national level associated with trade relationships between local areas** (R1, R3; S7). This analysis has helped Whitehall think about particular allocation formulas relating to the Local Growth Fund and the forthcoming “Shared Prosperity Fund”, resulting in more **effective policy implementation**; for example, Local Enterprise Partnerships across England will benefit from a more place-based and evidence-based distribution of funding covering the next six years in the areas of regional economic development (R1, R3; S6, S7).
- iii. We have shaped **discussions leading up to the Spending Review**. Specifically, how funds should be used to help local areas to prepare and recover after Brexit has been informed by our evidence on the implications of Brexit for the UK regions (R1–R4; S6, S7).
- iv. We have helped **reshape the “place” consideration in the new edition of the Green Book**, the national guidance for business cases (S8, S9). Specifically, our contribution to the place chapter emphasised the importance of the strategic case and setting objectives, and to ensure that all government funding is now assessed for place impacts (S10). This is already **changing the way government and funded organisations shape their intervention assessment processes**, and the new Green Book was used to agree the 2020 Spending Review.

## 5. Sources to corroborate the impact

**S1.** [The West Midlands Covid-19 Economic Impact Monitor](#) (WM REDI) [Available as PDF]

**S2.** Testimonial – Mayor of the WMCA and Chair of the WMCA Covid-19 Economic Impact Group (6<sup>th</sup> November 2020) [Available as PDF]

**S3.** Testimonial – Head of Economy and Local Industrial Strategy at the West Midlands Combined Authority (15<sup>th</sup> January 2021) [Available as PDF]

**S4.** WMCA [press release](#) and ‘[Recharge the West Midlands](#)’ document (referenced in the letter from the Mayor of the West Midlands, S2), developed from City-REDI’s work on the local industrial strategy (23<sup>rd</sup> June 2020) [Available as PDF]

**S5.** WMCA press release announcing ‘[Get Britain Building](#)’ fund of £66m for the region (mentioned in the letter from the Head of the Economy and Local Industrial Strategy, S3) (3<sup>rd</sup> July 2020). [Available as PDF]

**S6.** Testimonial – Deputy Director, Business and Local Growth Analysis, UK Department for Business, Energy and Industrial Strategy (12<sup>th</sup> October 2020). [Available as PDF]

**S7.** Thissen, M., Lankhuizen, M., van Oort, F., Los, B. (2018) [EUREGIO: The construction of a global IO DATABASE with regional detail for Europe for 2000–2010](#), *Tinbergen Institute* 084/VI. [Available as PDF]

**S8.** [The Green Book User Group – Strong Foundations for Better Intervention Development – City REDI Blog \(bham.ac.uk\)](#) (2<sup>nd</sup> December 2020). [Available as PDF]

**S9.** [The Green Book \(2020\) – GOV.UK \(www.gov.uk\)](#) (3<sup>rd</sup> December 2020). [Available as PDF]

**S10.** Testimonial – Deputy Director, Green Book Review Team, HM Treasury (2<sup>nd</sup> December 2020). [Available as PDF]

**S11.** The West Midlands’ Automotive Industry in the Aftermath of COVID-19: Survival of the Fittest? (02.06.20) [Policy Briefing: The West Midlands’ Automotive Industry in the Aftermath of COVID-19: Survival of the Fittest? – City REDI Blog \(bham.ac.uk\)](#). [Available as PDF]