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Citation for published version:

Bhattacharjee, A, Nguyen, D & Venables, AJ 2020, 'The prospects for regional disparities in the UK in times of Brexit and COVID-19', *National Institute Economic Review*, vol. 253, pp. R1-R3.
<https://doi.org/10.1017/nie.2020.25>

Digital Object Identifier (DOI):

[10.1017/nie.2020.25](https://doi.org/10.1017/nie.2020.25)

Link:

[Link to publication record in Heriot-Watt Research Portal](#)

Document Version:

Peer reviewed version

Published In:

National Institute Economic Review

Publisher Rights Statement:

This is the accepted version of the following article: Bhattacharjee, A., Nguyen, D. and Venables, T., 2020. THE PROSPECTS FOR REGIONAL DISPARITIES IN THE UK IN TIMES OF BREXIT AND COVID-19. *National Institute Economic Review*, 253, pp.R1-R3., which has been published in final form at <https://doi.org/10.1017/nie.2020.25>

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The prospects for regional disparities in the UK in times of Brexit and Covid-19

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This version: 8 July 2020

Disparities come in many shapes and forms and are highly persistent

Regional or spatial inequalities are a concern in most (if not all) countries and with the current 'levelling-up' agenda they are also a priority of policymakers in the UK. Most often spatial inequalities are analysed as differences in GDP per capita or productivity at some subnational level of aggregation (e.g. regions, cities, local authorities). However, regional inequalities can have many dimensions, not all of which are apparent in standard macroeconomic measures of the economy. As well as regional differences in average income and wealth, there are differences in opportunity and job quality, health and wellbeing. For example, Covid-19 is a large unanticipated shock that is not policy-induced but has widely different impacts upon destitution in different regions and their populations (Bhattacharjee and Lisauskaite, 2020). Ultimately, while spatial denominations of places can sometimes feel arbitrary, there are systematic differences in the productivity and wellbeing of individuals across these spatial areas, and these merit the attention of policymakers.

At the same time, policies affect spatial inequalities. For example, austerity-related cuts to local government budgets since 2010 have been unevenly distributed across the country and increased spatial inequalities (Gray and Barford, 2018), with cities in the North East hit the hardest. Moreover, the UK's Industrial Strategy is heavily focussed on R&D and favouring specific sectors. This means that to some degree it is a *spatial* policy since sectors tend to be concentrated in a few places only. If supported sectors are located in places that are already better off, there is a concern that sector-based policies can actually increase regional disparities.

Based on a large number of empirical measures, spatial inequalities in the UK are higher than in other developed countries (McCann, 2020). The first article in this issue by Carrascal-Incera, McCann, Ortega-Argilés and Rodríguez-Pose explores the extent of inequalities between regions and cities in the UK and compares them to other European and OECD countries. They find no relationship between spatial inequalities and economic growth and they suggest that spatial inequality has been a drag for the UK's national economic growth. As an explanation they propose that low levels of investment in weaker regions means the UK is leaving substantial untapped potential on the table. Moreover, in international comparisons the UK's hyper-centralised governance structure means that public investment decisions are mainly taken in London. The article concludes that carefully designed devolution could be beneficial for national economic growth. Insights drawn from the German experience, however, show that the scale of necessary investments that are needed to tackle regional disparities are substantial. The latter point is echoed by Lord Kerslake (i.e. '*go big or go home*') in the final report of the UK2070 Commission (UK2070 Commission, 2020).

Importantly, the findings leave substantial scope for policy relevant research. New Economic Geography (Krugman, 1991; Krugman and Venables, 1996; Fujita et al., 1999) models, for example, highlight the potential for multiple agglomeration clusters to emerge if policies support production of intermediate goods or innovations (Krugman and Venables 1995). Hence there is a case for policy intervention to decentralise economic activity, at the same time as there is lack of clarity and consensus about which policies work and which do not (Venables, 2006).

Major economic shocks could worsen spatial inequalities further

With Brexit and Covid-19 the UK is facing two large economic disruptions that are clearly affecting some places more negatively than others. Hence – in the absence of adequate policy intervention – they will likely worsen spatial disparities in the UK even further. First, due to Covid-19, large groups of workers are required to work from home. However, evidence shows that this transition has been easier for workers with higher incomes and jobs in service sectors such as finance, insurance and professional services (Costa Dias et al., 2020), both of which are likely to be found in richer regions. In terms of the overall share of jobs that could be done from home, London is leading (almost 60% of jobs), followed by the South East and South West, while the share is lowest for the North East (below 40%), as well as Scotland, Wales and Northern Ireland (Costa Dias et al., 2020). Overall, Covid-19 is expected to hit disadvantaged regions harder (Aitken and Overman, 2020; Bhattacharjee and Lisauskaite, 2020).

There is also another dimension to this issue, since even those workers that can work from home face different levels of digital infrastructure that enables them to effectively do so. Aitken et al. (2019) show that the regional differences are stark, with the share of premises that have ultra-fast internet reaching 75% in London but only 31% in Wales. The increasing digitalisation of our economies (accelerated by Covid-19) means that digital skills of the workforce are becoming more important. However, when looking at the distribution of various ‘online’ activities we can see considerable differences across people living in different places (see Table 1). For example, while around 90% of Londoners use the internet to send and receive emails, the share in the West Midlands is only 78%. Similarly, almost 60% of people in London and the South West use the internet to use information for work or study purposes, while it is less than 40% in Yorkshire & The Humber and below 50% in the North East and North West. Similar regional differences can be seen for the use of online banking or the cloud services to store and access files.

Table 1. Digital skills across regions in the UK.

Region	Have internet access at home	Send/receive emails	Find information online for work/study	Access files via cloud service	Use online banking
England	86%	85%	50%	25%	65%
Scotland	82%	79%	42%	24%	64%
Wales	82%	81%	47%	20%	58%
Northern Ireland	84%	75%	32%	19%	68%
London	87%	90%	59%	24%	59%
South East	90%	89%	50%	26%	68%
South West	91%	90%	59%	28%	70%
East Midlands	83%	86%	46%	23%	64%
West Midlands	82%	78%	44%	24%	64%
East of England	87%	85%	53%	29%	72%
Yorkshire & The Humber	78%	76%	38%	19%	59%
North East	88%	88%	47%	32%	67%
North West	85%	80%	49%	22%	62%
Urban	85%	84%	49%	24%	64%
Rural	88%	87%	52%	29%	67%

Source: Ofcom Nations & Regions Technology Tracker – 2019. Percentages show share of people in the UK that are using the internet for a given category of online service.

The other major economic disruption that the UK is currently facing is its departure as a member of the European Union. The direct impact on regions is twofold. First, due to varying degrees of economic relations with the EU it is likely that Brexit will hit some places harder than others. Indeed, consistent with New Economic Geography (Fujita et al., 1999) models, the UK has a

strong core-periphery spatial structure of economic activity. Then, shocks such as COVID-19 or Brexit are expected to demonstrate hot-spot spatial diffusion (Bhattacharjee et al., 2014) centred on London and nearby regions. However, while studies show that those highly affected places are more likely to be in the richer South of England these regions are also more likely to adapt in the long-run due to higher levels of productivity and skill levels (Dhingra et al., 2017). Second, by leaving the EU the UK is losing access to the EU's structural funds such as the European Regional Development Fund (ERDF). Funds from the ERDF are reserved for development projects in the poorest regions of a country, and for the period 2014-2020 alone €17.2 billion were allocated to the UK (Aitken et al. 2020).

The term “regional resilience” is often used to describe the way in which regions respond economic shocks such as Brexit and Covid-19. Following Martin (2012) resilience can be divided into resistance, recovery, re-orientation, and renewal. The article by Sensier and Devine in this issue analyses the economic resilience of UK regions in light of the economic fallout from the global financial crisis in 2007/08. The authors use business cycle turning points in value-added, employment and productivity and develop a regional resilience scorecard. They develop empirical measures for the four dimensions described above. It is clear that a better understanding of regional resilience can help policymakers to understand what policies regions need in order to recover from economic shocks. Sensier and Devine find that the South East and South West are the most resilient regions in the UK, with Northern Ireland and the North East being the least resilient ones. Then, policies targeted at less resilient regions can advance a gradual process of industrialisation in the form of a sequence of waves (Puga and Venables, 1996) that ultimately bring about greater spatial equality.

Better data is needed to show what is going on at the regional level

Productivity is the main source for long-term economic growth and regional economic disparities tend to arise when highly productive firms and workers cluster in some places. There are many factors that determine regional productivity, including spending on research and development, worker skills and education, and investments in infrastructure. In turn, the spatial concentration of highly productive firms and workers can turn into a self-reinforcing cycle due to knowledge spillovers, specialised labour pools, and backward- and forward linkages between buyers and suppliers (Fujita et al., 1999). Further, these processes of agglomeration are mediated by input-output linkages (Krugman and Venables, 1995; Venables, 1996).

Data for the UK show that spending on research and development, investments in infrastructure, and the education level of workers are all highly unevenly distributed and disproportionately high in the South East and London (Aitken et al., 2019). Another key factor that economic theory associates with the economic performance of a firm or place is the amount of available capital (per worker). For countries in continental Europe, there is an existing literature on understanding regional productivity patterns in terms of capital stock and its vintage; see, for example, Bhattacharjee et al. (2009) for Denmark. However, regional data on capital stocks have been difficult to come by in the UK.

In the next paper of this issue, Gardiner, Fingleton and Martin use a new dataset on regional capital stocks in the UK to show that both physical and human capital are in fact important determinants of labour productivity. In addition to the prominent role of capital deepening (i.e. increasing the amount of available capital per worker), their study also highlights an interaction effect between capital and labour. They show that as regions accumulate more human capital the importance of physical capital decreases and they speculate that this could be due to the increasing importance of intangible capital, which is currently not well-measured. The worrying implication is that while

the scale of regional disparities in productivity have already widened in recent decades, their finding suggests that richer regions (with higher levels of human capital) could pull further ahead. The authors conclude that raising the productivity levels of the UK is mainly a question of raising productivity outside of London and the South East.

The final article of this issue also focuses on improving the availability of regional data in the UK. More specifically, Koop, McIntyre, Mitchell and Poon produce more up-to-date data on quarterly regional economic output and labour productivity, at a higher frequency and with much less delay. Their method allows for nowcasting quarterly regional GDP shortly after the national quarterly GDP figures for the UK are released. This is a considerable improvement over the existing Regional Short Term Indicators (RSTIs) which are released with a delay of 6 months and do not cover Scotland and Northern Ireland. In addition, while the official RSTIs are only available until 2012, their paper extends this series backwards until 1970. Their figures are largely in line with ONS estimates and shows that between 1998-2018, Scotland and London have been the regions with the fastest average growth in productivity. The lowest average productivity growth was registered in Northern Ireland, South West and East of England. While substantial differences in productivity performance can be seen across different regions the authors highlight that this is partly driven by number of hours worked, rather than by changes in output.

References

- Aitken, A., Boshoff, J., Nguyen, D., Rincon-Aznar, A., and Stochino, A. (2019), “*Places and Spaces: Mapping Britain’s Regional Divides*”, NIESR General Election Briefing, December 2019.
- Aitken, A., and Overman, H. (2020), “*How will the economic effects of coronavirus vary across areas of the UK?*”, Economics Observatory, July 2020.
- Bhattacharjee, A., Castro, E., and Jensen-Butler, C. (2009), “Regional variation in productivity: a study of the Danish economy”, *Journal of Productivity Analysis*, 31(3): 195-212.
- Bhattacharjee, A., and Lisauskaite, E. (2020), “COVID-19 impacts on destitution in the UK: Microsimulation projections by regions, sectors and household types”, *National Institute Economic Review*, 253 (in this issue).
- Bhattacharjee, A., Maiti, T., and Petrie, D. (2014), “General equilibrium effects of spatial structure: Health outcomes and health behaviours in Scotland”, *Regional Science and Urban Economics*, 49: 286-297.
- Costa Dias, M., Farquharson, C., Griffith, R., Joyce, R., and Levell, P. (2020), “*Getting people back to work*”, IFS Briefing Note BN286, The Institute for Fiscal Studies, May 2020.
- Dhingra, S., Machin, S., and Overman, H. (2017), “Local Economic Effects of Brexit”, *National Institute Economic Review*, 242: 24-36.
- Gray, M., and Barford, A. (2018), “The depths of the cuts: the uneven geography of local government austerity”, *Cambridge Journal of Regions, Economy and Society*, 11(3): 541–563.
- Fujita, M., Krugman, P., and Venables, A.J. (1999), “*The Spatial Economy: Cities, Regions and International Trade*”, Cambridge, MA and London: The MIT Press.
- Krugman, P. R. (1991), “*Geography and Trade*”, Cambridge, MA and London: MIT Press.
- Krugman, P. R., and Venables, A. J. (1995), “*Globalization and the inequality of nations*”, *The Quarterly Journal of Economics*, 110(4): 857-880.
- Krugman, P. R., and Venables, A. J. (1996), “*Integration, specialization, and adjustment*”, *European Economic Review*, 40(3-5): 959-967.
- Martin, R. (2012), “Regional economic resilience, hysteresis and recessionary shocks”, *Journal of Economic Geography*, 12(1): 1–32.
- McCann, P. (2020) “Perceptions of regional inequality and the geography of discontent: insights from the UK”, *Regional Studies*, 54(2): 256-267.
- Puga, D., and Venables, A. J. (1996), “*The spread of industry: spatial agglomeration in economic development*”, *Journal of the Japanese and International Economies*, 10(4): 440-464.
- UK 2070 Commission (2020), “*Make No Little Plans – Acting At Scale For A Fairer And Stronger Future*”, UK 2070 Commission, February, 2020.
- Venables, A. J. (1996), “*Equilibrium locations of vertically linked industries*”, *International Economic Review*, 37(2): 341-359.
- Venables, A.J. (2006), “Shifts in economic geography and their causes”, *The New Economic Geography – Effects and Policy Implications: A Symposium* (Vol. 4, No. 1, p. 15), Federal Reserve Bank of Kansas City.