REGIONAL SUCCESS
AFTER BREXIT
With the vote on 23 June 2016 for the UK to leave the European Union it has become imperative for individuals, business, government and wider society to understand the implications of the referendum result. This series, published in collaboration with the Centre for Brexit Studies at Birmingham City University, UK, examines a broad sweep of topics related to Brexit. It aims to bring together academics from across the disciplines to confront and examine the challenges withdrawal from the EU brings. The series promotes rigorous engagement with the multifaceted aspects of both the ‘leave’ and ‘remain’ perspectives in order to enhance understanding of the consequences for the UK, and for its relationship with the wider world, of Brexit, and aims to suggest measures to counter the challenges faced.

Published Titles

Alex De Ruyter and Beverley Nielsen, *Brexit Negotiations After Article 50: Assessing Process, Progress and Impact*

Forthcoming Titles

Arantza Gomez Arana, *Brexit and Gibraltar: The Negotiations of a Historically Contentious Region*

Stefania Paladini and Ignazio Castellucci, *European Security in a Post-Brexit World*
REGIONAL SUCCESS AFTER BREXIT: THE NEED FOR NEW MEASURES

BY

DAVID HEARNE

AND

ALEX DE RUYTER

Birmingham City University, UK
CONTENTS

Lists of Tables and Figures vii
About the Authors ix

1. Thinking Inside the Box: Defining the Problem 1
2. Thinking Outside the Box (Part 1):
   Real Living Standards 19
3. Thinking Outside the Box (Part 2):
   Real Labour Productivity 39
4. Policy Implications 75
Appendix 1: GDHI 99
Appendix 2: The EKS Method 100
Appendix 3: FISIM 103

Bibliography 107
Index 131
This page intentionally left blank
LISTS OF TABLES AND FIGURES

Tables
Table 1. Types of Region 7
Table 2. Estimated Regional GDP Proportions 55
Table 3. Median Full-time Salaries (£) by Sector in 2016 61
Table 4. Estimated Regional PPPs 67
Table 5. The Impact of Different Rental Cost Deflators 70
Table 6. Per Capita Funding (£) for Transport and Education, UK Government Office Region (GORs) 78

Figures
Figure 1. Comparative Economic Performance 17
Figure 2. Estimated Regional Consumer Price Levels 29
Figure 3. Real Regional Incomes in the UK 31
Figure 4. GDHI Per Capita in Combined Authorities (UK = 100) 32
Figure 5. Relative Costs of Gross Fixed Capital Formation 60
Figure 6. Estimated Absolute Lower Bound PPPs by Region 65
Figure 7. Relative Regional Productivity in the UK 71
This page intentionally left blank
ABOUT THE AUTHORS

David Hearne is a Researcher working in the Centre for Brexit Studies at Birmingham City University, UK. He joined the centre in 2017, having worked in an independent think tank previously. His work focusses on understanding all aspects of regional economic performance with a particular focus on the West Midlands.

Alex de Ruyter is a Professor and Director of the Centre for Brexit Studies at Birmingham City University, UK. He brings a wealth of research experience and academic engagement in Brexit and the related areas of regional economic development, skills and labour market issues. He has published over 50 academic outputs in leading national and international journals and has been the recipient of research funding, including being an investigator in the ESRC funded study on the effects on subsequent employment experience of workers from MG Rover after plant closure in 2005.
This page intentionally left blank
THINKING INSIDE THE BOX: DEFINING THE PROBLEM

1.1 OVERVIEW

This chapter offers a brief overview of the present state of evidence on regional disparities across Britain. We discuss the importance of different measures of regional economic performance before going on to challenge and extend conventional measures. The post-Brexit environment will pose notable challenges for regional policy, but also offers the opportunity to reassess regional needs and appropriate funding formulae. The chapter is laid out as follows:

- **Introduction** – Brexit forces us to reconsider regional inequalities and the introduction outlines the key issues that need to be addressed.

- **Defining the region** – The shifting sands of British regional policy have seen regions successively redefined from the top down. Here the authors reconsider various regional designations.
• *Existing measures* – This portion of the chapter outlines the main measures used to assess regional economic performance, most notably gross value added (GVA).

• *Commuting* – The chapter then describes how commuting has a major distortionary effect on GVA per capita – a measure used by the European Union (EU) in decisions about structural funding.

• *Demographics* – In this section, we consider the ways in which demographic factors can also have an impact on estimates of regional economic performance and deprivation.

• *Towards a better measure* – The chapter concludes by putting forward preferred measures of regional economic performance, whilst noting that all can be suffer from some crucial weaknesses that we address throughout the rest of the book.

### 1.2 Introduction

The Brexit vote has shone a harsh light on something that academics and practitioners have known for years: regional differences matter. In the West Midlands, almost 60% of votes were to leave the EU. In London, almost 60% of votes were to remain. Indeed, some have argued that the vote should be seen as the ‘revenge of places that don’t matter’ (Rodríguez-Pose, 2018). This has occurred in spite of the fact that EU structural funding has been concentrated in many of these regions and that a number of them are particularly exposed to EU trade (Los, McCann, Springford, & Thissen, 2017).

One of the most interesting findings from our recent ‘Brexit Roadshow’ has been a pervasive sense of inequity and abandonment across a diverse range of communities.
Comments such as ‘they [London] get everything’ (De Ruyter, Hearne, Guy, Semmens-Wheeler, & Goodwin, Forthcoming) and ‘nobody cares’ alongside disparaging remarks about the local area (De Ruyter et al., Forthcoming) illustrate communities that often seethe with resentment at perceived iniquities in the allocation of services.

Certainly, the extent of spatial inequality within the UK across some measures is striking (McCann, 2016). A man born in Blackpool can expect a lifespan shorter than his Albanian equivalent (Office for National Statistics (ONS), 2016a; World Health Organisation, 2016). A woman born in Kensington, in contrast, can expect to live past her 86th birthday, rivalling Japan for the world’s longest life expectancy. These differences are stark – if Blackpool could halve the gap between itself and Barnet in North London then the effects would be transformative. We also note that there is at least *prima facie* evidence of a link between some of them and the Brexit vote (Bell & Machin, 2016; Pidd, 2016).

This book makes a fundamental contribution to our understanding of these regional disparities in the light of Brexit, by introducing new measures that can help us further our understanding of those areas that have been ‘left-behind’. In doing so, it is necessary to tackle the fundamental issues in a systematic and logical way. As the infographic below demonstrates, the first is the question is what policy makers and practitioners are ultimately seeking to answer. In order to do this, however, the latter two questions must be addressed. After all, the appropriate policy response is likely to be very different depending on the answer to the second question, and much academic ink has been spilled trying to resolve it. In many ways, however, it is the third question that is most fundamental of all. In order to judge potential policy actions, we need to understand what regional success and failure look like.
Although we know that regional imbalances in the UK span almost every domain, good policy requires more knowledge than this. In particular, it is necessary to quantify ‘success’ both in terms of living standards and the functional economic geography of an area. Existing measures fail to capture important aspects of both of these and the proposed ‘deflated’ measures can extend our understanding of these.

This book therefore builds upon official data and international best practice to develop a series of measures with which to assess regional living standards and economic performance before exploring the ramifications of these in light of the UK’s vote to leave the EU. We begin by critiquing what has become the de facto measure of regional economic performance – GVA per capita – and draw upon existing research to do so.

The main body of the book is concerned with deriving measures to best capture the true differences in both living standards and productivity across regions, particularly given that both academic evidence (Los et al., 2017) and a majority of experts believe that Brexit threatens to exacerbate these (De Ruyter, Hearne, & Tsiligiris, in prep.). Regional statistics in the UK do not take into account differences in the cost of living across the country.
Defining the Problem

This impacts a wide variety of measures including GVA, household incomes and wages. Happily, methodological developments over recent decades and the emergence of a greater variety of official data sources enable us to make an initial attempt to develop deflators to adjust for these issues. Although some of the methodological distinctions between different deflators are subtle, the overall issue and direction of adjustment is clear.

This is key to developing appropriate policy measures, both to mitigate the impact of Brexit on more vulnerable regions and household and to address many of the insecurities and inequalities that played a factor in the vote to leave the EU. The final portion of the book therefore discusses the policy questions raised by these issues. Brexit affords an opportunity to reassess funding formulae and we argue that this must take the findings of this book into account. Particular attention needs to be paid to the likely evolution of regional policy and funding in the light of Brexit.

1.3 DEFINING THE REGION

Recent years have seen a growing awareness of the importance of regional differences within the UK. Indeed, even the Chief Economist of the Bank of England has recently acknowledged the importance of regional differences across the UK economy (Haldane, 2018). It is clear that not only is the UK spatially unbalanced in an economic and social sense, but as continued interest in the so-called ‘West Lothian question’ shows, there is also a clear political imbalance between the devolved administrations in Scotland, Wales and Northern Ireland and the English regions.

As noted by Benneworth (2006), there are historical antecedents to the present devolution agenda. Added to this is the
need for a distinction between the region as an economic unit and the region as a facet of identity (Roberts & Baker, 2006). Indeed, the rise of a more assertive English identity that the Brexit vote has made clear (Henderson et al., 2016) could be seen as threatening this nascent regionalisation of politics. The overwhelming vote against a regional assembly in the North East of England in 2004 (Wood, Valler, Phelps, Raco, & Shirlow, 2006) might be seen in the same vein. Brexit itself exhibits a significant regional dimension with some recent research finding that regional differences in measured (psychological) character traits might have been important in the referendum (Garretsen, Stoker, Soudis, Martin, & Rentfrow, 2018).

Nevertheless, in spite of the fact that regional identity in Britain remains somewhat inchoate, the fact remains that the region is often the more sensible level on which to carry out economic policy. In fact, identity in the UK is often local more than regional – witness the fierce rivalry between underland and Newcastle (those who ‘mackem’ vs. those who ‘tackem’) or Birmingham and the Black Country. This may, in part, be a result of the historic political centralisation of the UK which has seen regional boundaries adjusted numerous times over the past century without adequate study as to what the functional economic geography looks like (Roberts & Baker, 2006).

We are left with three potential ways in which to ‘regionalise’ the UK.

In practical terms, it is not feasible to use TTWAs as they presently stand. Their major attraction is that they potentially capture the economic geography of an area better than any alternative. Unfortunately, for our purposes the 75% threshold is probably not appropriate, particularly given that mean values can be significantly affected by the commuting patterns of a relatively modest number of high income individuals. Given this, their failure to align with any administrative or political boundary is also a disadvantage.
<table>
<thead>
<tr>
<th>Type of Region</th>
<th>Definition</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel to Work Area</td>
<td>Defined by the ONS as regions in which 75% of the economically active population work within the area and, simultaneously, 75% of the working population are also resident in the area.</td>
<td>Captures areas with large commuting flows (such as Bromsgrove, Redditch and Tamworth into Birmingham). An official attempt to capture the functional economic geography of an area.</td>
<td>Potentially understates the importance of commuting, particularly for high-income individuals. A 90% figure might be more appropriate. Watford, St. Albans, Basildon and Stevenage are all London commuter towns but are not within the London TTWA. TTWAs also have no political significance (unlike city-regions or even Local Enterprise Partnership (LEPs)), not least because commuter flows change over time.</td>
</tr>
<tr>
<td>City-Regions</td>
<td>Those areas which have become a ‘Combined Authority’. Many have elected a ‘metro-mayor’ plus London, Scotland, Wales and Northern Ireland.</td>
<td>Areas of political significance with some powers over policy making. They also have an interest in local economic performance. This appears to be the level at which further devolution of powers is likely to occur.</td>
<td>Leaves large swathes of the country unaccounted for. London and the devolved nations are different in size and nature to the city-regions. Ignores the impact of substantial inward commuting in most of these areas (and the potential for more of this). Some have sought to mitigate this (e.g. by having ‘observer’ councils from the surrounding areas).</td>
</tr>
<tr>
<td>‘Standard’ Regions</td>
<td>Standard statistical regions used by the EU when determining regional funding. Nowadays largely coterminal with official regions within the UK.</td>
<td>A wider range of data is typically available, particularly for larger regions. As a result, practitioners are typically familiar with the units of analysis.</td>
<td>The regions in question rarely overlap neatly with the economic geography of an area. These regions do not always overlap with the relevant political units (most notably Combined Authorities) either. Regional identity is often lacking (in contrast to, say, German Länder).</td>
</tr>
</tbody>
</table>
Fundamentally, however, there is a relative paucity of data (particularly price data) on these areas, making them unusable for our purposes.

The attraction of using city-regions lies in their political salience. The emphasis of the so-called ‘New Economic Geography’ on agglomeration chimes nicely with this political zeitgeist, even though this may be more relevant to present-day developing countries than the UK (Krugman, 2011). Indeed, although the benefits of agglomeration are considered axiomatic by some in the policy community (Swinney, 2016), the empirical evidence is far from incontrovertible.

For example, Frick and Rodriguez-Pose (2018) find that small cities (up to 3 million inhabitants) are most conducive to rapid economic growth and some French data suggest that agglomeration effects are likely to be modest on a plant-level (Martin, Mayer, & Mayneris, 2011). Indeed, although some have found that agglomeration might support productivity growth (Rice, Venables, & Patacchini, 2006), recent work suggests that historical development paths are crucial (Beugelsdijk, Klasing, & Milionis, 2018).

Research suggests that, in the UK at least, the performance of cities and urban areas is intimately linked to the regions in which they are located (McCann, 2016). In addition, choice of residential location within a region (and the associated differences in cost) may in large part be due to differences in amenities offered. This, together with consumer preferences may partly explain differences between urban centres and their associated peri-urban areas and rural fringes. As a result, we initially consider differences at the level of nomenclature of territorial units for statistics (NUTS) Regions, before reconsidering the impact of our results at a more granular level. In doing so, we find some significant differences from published figures and suggest that this has salience for post-Brexit funding.