

DR MAX NATHAN

www.maxnathan.com | @iammaxnathan

SUMMARY

I am an economic geographer with a background in public policy. My **research** focuses on urban economic development, especially the economics of immigration and diversity, innovation systems and tech clusters, and public policy / policy evaluation for cities. I use mainly quantitative methods and firm-level analysis. I am an **Associate Professor** in **Applied Urban Sciences** at **CASA, University College London**. Prior to this I spent 15 years outside academia in non-profits and consultancy, and some time in central government. I am a co-founder of the **Centre for Cities** think tank and the **What Works Centre for Local Economic Growth**. I am also an affiliate at **CAGE, CEP, IZA, NIESR** and **City-REDI, Birmingham University** and an elected **Fellow of the Regional Studies Association**.

ACADEMIC EMPLOYMENT

2019 –	Associate Professor [Reader] in Applied Urban Sciences, CASA, University College London
2013 – 2021	Co-founder and Deputy Director, What Works Centre for Local Economic Growth, London School of Economics and Political Science
2015 – 2019	Senior Birmingham Fellow [Senior Lecturer], Department of Strategy and International Business and City-REDI, Birmingham Business School
2012 – 2015	Senior Research Fellow, National Institute of Economic and Social Research
2012 – 2015	Public Affairs Research Fellow, Spatial Economics Research Centre, London School of Economics and Political Science

NON-ACADEMIC EMPLOYMENT

2007-2010	ESRC-funded Policy Advisor, Department of Communities & Local Government
2004-2007	Co-founder and Head of Research, Centre for Cities
2000-2004	Senior Researcher, Work Foundation
1998-2000	Research Assistant, Centre for Local Economic Strategies

OTHER AFFILIATIONS

CAGE; CEP; IZA; NIESR; City-REDI, Birmingham University
Elected Fellow, Regional Studies Association. Member of the RGS-IBG

EDUCATION

2011	PhD Economic Geography and Spatial Economics Supervisors: Henry Overman, Ian Gordon	LSE
2009	Visiting Scholar Institute of Urban and Regional Development	UC Berkeley
1998	MSc Social Policy and Planning Awarded: Distinction	LSE
1997	BA (Hons) Politics, Philosophy and Economics Awarded: 2:1	Oxford University
2018	Fellow, Higher Education Academy	HEA
2018	PGCert Higher Education, Full	LSE

PEER REVIEWED JOURNAL ARTICLES

- [1] Incubators, Accelerators and Urban Economic Development (2022) (with M. Madaleno, H. Overman and S. Waights). **Urban Studies**. 59:2, pp 281-300. LEAD ARTICLE
- [2] Innovative Events (2022) (with A. Rosso). **Research Policy**. 51(1), pp 104373.
<https://doi.org/10.1016/j.respol.2021.104373>
- [3] The City and the Virus (2021) **Urban Studies**. <https://doi.org/10.1177/00420980211058383>
- [4] Does light touch cluster policy work? Evaluating the Tech City programme (2020) **Research Policy**. <https://doi.org/10.1016/j.respol.2020.104138>
- [5] Will Coronavirus Cause a Big City Exodus? (2020) (with H. Overman) **Environment & Planning B**, 47:9, pp 1537-1542.
- [6] Creative Differences? Creative Economy Employment in the US and UK (2020) (with T. Kemeny and D. O'Brien) **Regional Studies**, 54:3, pp 377-387.
- [7] Spatial Imaginaries and Tech Cities: Place-branding East London's Digital Economy (2019) (with E. Vandore and G. Voss) **Journal of Economic Geography**, 19:2, pp 409-432.
GEOGRAPHY STREAM, Editor: Neil Coe
- [8] Ethnic diversity and business performance: Which firms? Which cities? (2016) **Environment and Planning A**, 48:12, pp 2462-2483.
- [9] Do Inventors Talk to Strangers? On proximity and collaborative knowledge creation (2016) (with R. Crescenzi and A. Rodríguez-Pose). **Research Policy**, 45:1, pp 177-194.
- [10] Mapping Digital Businesses with Big Data: some early lessons from the UK (2015) (with A. Rosso). **Research Policy**, 44:9, pp 1714-1733.
- [11] Same Difference? Ethnic inventors, diversity and innovation in the UK (2015). **Journal of Economic Geography**, 15:1, pp 129-168. ECONOMICS STREAM, Editor: Kristian Behrens
- [12] After Florida: Towards an economics of diversity (2015). **European Urban and Regional Studies**, 22:1, pp 3-19. LEAD ARTICLE. [2016 Jim Lewis Prize winner, best paper in European Urban and Regional Studies during 2015](#)
- [13] Here Be Startups: Exploring a young digital cluster in Inner East London (2014) (with E. Vandore). **Environment and Planning A**, 46:10, pp 2283-2299. LEAD ARTICLE
- [14] The Wider Economic Impacts of High-Skilled Migrants: A review of the literature for receiving countries (2014). **IZA Journal of Migration**, 3:4, doi: 10.1186/2193-9039-3-4.
- [15] Evaluating Spatial Policies (2014) (with S. Gibbons and H. Overman), **Town Planning Review**, 85:4, pp 427-432.
- [16] Cultural Diversity, Innovation and Entrepreneurship: Evidence from London firms (2013) (with N. Lee). **Economic Geography**, 89:4, pp 367-394.
- [17] Agglomeration, Clusters and Industrial Policy (2013) (with H. Overman). **Oxford Review of Economic Policy**, 29:2, 383-404.
- [18] East London Tech City: Ideas without a Strategy? (2011). **Local Economy**, 26:3, pp 197-202.
- [19] Cultural diversity and innovation in London: Evidence from firm-level data (2010) (with N. Lee). **International Journal of Knowledge-Based Development**, 1:1/2, pp 53-78.
- [20] The Wrong Stuff: Creative Class theory in UK cities (2007). **Canadian Journal of Regional Science**, XXX, Autumn, pp 127-148.
- [21] Beyond City Living (2006) (with R. Unsworth). **Built Environment**, 32:3, pp 235-249.
- [22] Them And Us: Britain and the European City (2006) (with A Marshall) **Public Policy Research**, 13:2, pp 109-118.

PAPERS IN REVIEW

[1] Creative Clusters and Creative Spillovers: Evidence from UK Cities, 1997-2108 (with D. Gutierrez-Posada, A. Kitsos and M. Nuccio). See: PEC Discussion Paper 2021/07. *Revise and Resubmit*, **Economic Geography**.

[2] Modelling Clusters from the Ground Up: A Web Data Approach (with C. Stich and E. Tranos). See: CASA Working Paper 227. *Revise and Resubmit*, **Environment & Planning B**.

BOOKS

[1] *Urban Economics and Urban Policy* (with P. Cheshire and H. Overman). May 2014. Cheltenham: Edward Elgar.

BOOK CHAPTERS

[1] 'The Urban Economics of Superdiversity', in F. Meissner, N. Sigona and S. Vertovec (eds), *The Oxford Handbook of Superdiversity*, forthcoming in 2022, Oxford: OUP.
See: *Spatial Economics Research Centre Discussion Paper SERCDP0068*, LSE.

[2] 'Proximity and Collaborative Knowledge Creation' (with R. Cresenzi and A. Rodríguez-Pose). In A. Torre and D. Gallaud (2022) (eds), *Handbook of Proximity Relations*, Cheltenham: Edward Elgar.

[3] 'Exploring Industry 4.0 Production in Sweden' (With C. Fassio). In D. Bailey and L. DePropris (2020) (eds.), *Industry 4.0: Transformational Regions*, Routledge: London.

[4] 'Linking Research and Policy in Local Economies', in L. Andres, J. Bryson and R. Mulhall (2019) (eds.), *A Research Agenda for Regeneration Economies*, Cheltenham: Edward Elgar.

[5] 'Exploring Digital Technology Industry Clusters using Administrative and Frontier Datasets' (with A. Rosso), in Z. Chen and L. Schintler (2017) (eds.) *Big Data for Urban and Regional Economies*, Oxford: Routledge.

[6] 'Microsolutions for Megaproblems: What works in urban regeneration policy?' in D. O'Brien and P. Matthews (eds) (2015), *After Urban Regeneration: People, communities and place*. Bristol: Policy Press.

[7] 'All in the mix? Top team demographics and business performance in English firms', in J. Bakens, P. Nijkamp and J. Poot (eds.) (2015) *E Pluribus Prosperitas: The economics of cultural diversity*. (2015), Cheltenham: Edward Elgar.

[8] 'Exploring Munich's innovation system' (with P. Rode et al), in R. Burdett, A. Colantonio and P. Rode (eds.) (2013) *Transforming Urban Economies: Policy Lessons from European and Asian Cities*, London, Routledge.

WORK IN PROGRESS

[1] The Economics of Blitzscaling (with M. Draca, V. Ngyuen, J. Oliviera-Cunha, A Rosso and A. Sivropoulos-Valero). Funded by the ESRC.

[2] The New Wave: Technology diffusion in the UK during the 2010s (with M. Draca, V. Ngyuen, J. Oliviera-Cunha, A Rosso and A. Sivropoulos-Valero). Funded by the ESRC.

[3] Identifying Emerging Industries using text-based classification (with M. Draca, V. Ngyuen, J. Oliviera-Cunha, A Rosso and A. Sivropoulos-Valero). Funded by the ESRC.

[4] Identifying the causal impact of tech accelerators on startups (with G. Nunez-Chaim, H. Overman, O. Silva, C. Riom and J. Schwarz). Funded by the Leverhulme Foundation

[5] Creative industries, housing markets and residential gentrification (with D. Gutierrez-Posada and A. Kitsos). Funded by the AHRC Creative Industries Policy and Evidence Centre

[6] Multipliers from a major public sector relocation: the BBC's move to Manchester (with H. Overman, C. Riom and M. Sanchez-Vidal)

PAST/RESTING PROJECTS

[1] Exploring Industry 4.0 Startups in an Urban Technology Cluster. Funded by Horizon 2020.

[2] Academics and global talent flows (with E. Tranos, D. Arribas-Bel, Y. Liu and C. Ozgen)

[3] Escape from Smart City (with D. Hill)

[4] Using Crunchbase to explore innovative ecosystems (with T. Kemeny and B. Almeer). See: *Birmingham Business School Discussion Paper 2017-01*, Birmingham University

[5] The Long Term Impacts of Migration on UK Cities. See: *LSE Migration Studies Unit Working Paper 10/09*, LSE.

POLICY REPORTS AND CONSULTANCY (selected)

High Streets for All (2017) (with H. Lewis, H. Martin, M. Meyere, P. Seguin, M. Worrell, S. Hall, J. King, F. Sajjid, C. Morris and R. Meera), report for the Greater London Authority.

Industrial Clusters in England (2016) (with M. Bernini, P. Ramirez, S. Adderley, R. Mulhall and SpazioDati), report for BIS.

Measuring the Creative Economy in the EU and the UK (2015) (with A. Pratt and A. Rincon-Aznar), report for NESTA, London: NESTA.

Evaluating Spatial Policies (2013) (with S. Gibbons and H. Overman). *SERC Policy Paper SERCPP0012*. London: SERC/LSE.

Analysis of the Economic and Labour Market Impacts of Tier 1 Entrepreneur and Investor Migrants (2013) (with H. Rolfe and C. Vargas-Silva), report for the Migration Advisory Committee.

Measuring the UK's Digital Economy with Big Data (2013) (with A. Rosso). London: NIESR / Growth Intelligence.

A Tale of Tech City: The Future of East London's Digital Economy (2012) (with E. Vandore and R. Whitehead). London: Centre for London.

Assessing the Government's Proposals to Reform the UK Planning System (2011) (with Henry Overman). *SERC Policy Paper SERCPP0011*. London: SERC/LSE.

Towards a Green Economy: Cities: Investing in energy and resource efficiency (2011) (with P. Rode, R. Burdett et al). UN Environment Programme, Nairobi: UNEP.

Munich: Staying Ahead on Innovation (2010) (With P. Rode, G. Kippenberg et al). LSE Cities / Brookings Metro Program Next Urban Economy Report, London: LSE.

Your Place or Mine: The local economics of migration (2008). London: ippr.

A Twenty-First Century Peabody Community (with D Ben-Galim and N Newman) (2008). London: ippr (for Peabody Trust).

Getting By, Not Getting On: Technology in UK workplaces (2003) (with G Carpenter, L Ferguson, H Knox and S Roberts). London: The Work Foundation.

Manchester: Ideopolis? (2002) (with A Westwood). London: The Work Foundation.

Reality IT: Technology in everyday life (2002) (with J Crabtree and R Reeves). London: TWF.

Getting Attached: New routes to full employment (2001). London: Fabian Society

LECTURES, CONFERENCES AND SEMINARS (selected, past / upcoming)

Invited keynotes / lectures

London School of Economics (December 2020), Swedish Entrepreneurship Forum (September 2018), PBL Autumn School, The Hague (October 2016), CREME 2016 Conference, Birmingham (October 2016), Pathways, Connections and Circuits 2015, Wellington, NZ (July 2015), RSA lecture, Reigate (September 2002).

Invited seminars, workshops and events

Aston University (March 2022), University of London workshop: Levelling Up London (October 2021), UK Government Cities and Local Growth Unit (September 2021), Department of Business, Innovation, Energy and Industrial Strategy (March 2021), SAD 2020 Future of Cities workshop, virtual (October 2020), Utrecht University (March 2020), University of Southampton (February 2020), CAGE-NESTA workshop: Data Science for the Economics of Science, Technology and Innovation, London (October 2019), KCL / CUSP London (October 2019), MacArthur Foundation / CASA (September 2019), Exploring Entrepreneurial Ecosystems, University of Glasgow (May 2019), University of Bath (March 2019), University of Bristol (February 2019), (March QMUL (January 2019), Bristol Festival of Economics (November 2018), Middlesex University (October 2018), CIFAR Urban Governance workshop 2, Toronto (August 2018), CIFAR Urban Governance workshop 1, Paris (December 2017), University of Liverpool (November 2017), Centre for London / Brookings Institution Innovation and placemaking seminar, London (September 2017), LSE Cities symposium, 'Urban Incubators, Innovation and Inequality', London (September 2017, co-organiser and speaker), PIK Cities as Complex Systems Symposium 2016, Hannover (July 2016), Manchester Business School (April 2016), RGS-IBG forum on 'Europe's Migration Crisis', London (March 2016, panel speaker), CIRCLE, Lund University (March 2016), Birmingham Business School GVC Cluster (March 2016), University of Leeds (December 2015), Imperial College London Business School (February 2015), UCL Bartlett School of Planning (January 2015), University of Birmingham (November 2014), ESRC Spaces of Evidence workshop, 'New Directions for Economic Policy', London (September 2014), LSE London workshop, 'How is London being transformed by migration?', LSE (March 2014), IGC Immigration Working Group (March 2014), LSE London (November 2013), Transatlantic Council on Migration (October 2013), 1st European Big Data workshop, Brussels (October 2013), LLAKES (June 2013), VU University / Tinbergen Institute workshop 'E Pluribus Prosperitas' (April 2013), LSE (October 2012), IZA AM² Migration Workshop (June 2012), APE-INV-ESF 'Science and Invention' workshop (May 2012), UCL Bartlett School of Planning (March 2012), LSE (March 2012), EUROLIO Geography of Innovation Workshop (January 2012), University of Amsterdam (June 2011), University of Oxford (May 2011).

Conferences

GEOINNO 2020, Stavanger (January 2020), Regional Studies Association Winter Conference, London (November 2019), Triple Helix Conference 16, Manchester (September 2018), 5th Global Conference on Economic Geography, Cologne (July 2018), Urban Economics Association European Meeting 2018, Dusseldorf (May 2018), GEOINNO 2018, Barcelona (January 2018), Regional Studies Association Winter Conference, London (November 2017), ESRC Urban Transformations Spring School, Oxford (May 2017), NESTA-Kauffman Innovation Growth Lab Annual Conference, London (May 2016), Association of American Geographers, San Francisco (March 2016), RCUK / Imperial College London Digital Economy 2014 Conference, London (December 2014), Regional Studies Association, London (November 2014), North American Regional Science Council, Washington DC (November 2014), Urban Economics Association Summer Meeting, Palermo (August 2013), NORFACE / UCL Annual Migration Conference, London (April 2013), Urban Economics Association, Ottawa (November 2012), Urban Economics Association, Miami (November 2011), Regional Studies Association, Newcastle (April 2011), Association of American Geographers, Seattle (April 2011), NORFACE / UCL Annual Migration, London (April 2011).

GRANTS AND FUNDING AWARDS (selected)

2020	UKRI: What Works Centre for Local Economic Growth Phase 3 (CI) (£2.7m)
2019	UKRI: Mapping the production, diffusion and drivers of future technologies. Warwick, UCL, LSE, Milan, Tech Nation, CogX (CI) (£534k)
2018	AHRC/ISCF: Local economic spillovers from the creative economy (PI) (£280k). Part of the AHRC/UKRI Industrial Strategy Challenge Fund Creative Industries Policy and Evidence Centre 2018-2023 (£8.5m)
2018	UKRI Industrial Strategy Challenge Fund: Supporting Local Industrial Strategies (CI) (£500k)
2017	ESRC/BEIS/DCLG/DWP/DfT: What Works Centre for Local Economic Growth Phase 2. LSE, Centre for Cities and Arup (CI) (£2.7m)
2016	Leverhulme Foundation: An RCT to evaluate the causal impact of Tech Accelerators on Startups (CI) (£230k)
2015	RSA: Early Career Grant, Evaluating Tech City (PI) (£9.5k)
2015	HEFCE HEIF5, LSE: Supporting Devolution Deals (CI) (£29k)
2015	New Economy Manchester: Economic Impacts of Low Pay (PI) (£29k)
2015	AAIR, University of Southampton: Tech ecosystems (CI) (£8.2k)
2014	NESTA: International comparisons of the creative economy (PI) (£30k)
2014	British Academy: Quantitative skills for public policymakers (CI) (£31k)
2014	NESTA/Kauffman Foundation: Innovation Growth Lab grant for innovation, entrepreneurship and growth experiments (PI) (£25k)
2013	ESRC/BIS/DCLG: What Works Centre for Local Economic Growth. LSE, Centre for Cities and Arup (CI) (£3.1m)
2013	LLAKES: Top team diversity and business performance (PI) (£8.5k)
2013	Heseltine Institute: Quantifying the economic impact of elected mayors (PI) (£5k)
2013	NESTA/Google: Exploring the drivers of the UK Digital Economy. NIESR and Growth Intelligence (PI) (£115k)
2013	UK Migration Advisory Committee: Economic and Labour Market Impacts of Tier 1 Entrepreneur and Investor Migrants (PI) (£40k)
2012	LLAKES: UK industrial policy (CI) (£55k)
2012	HEFCE HEIF5, LSE: From Urban Economics to Urban Policy (CI) (£91k)

HONOURS AND SCHOLARSHIPS

2019	Elected Fellow of the Regional Studies Association
2017	<i>Journal of Economic Geography</i> , Best Referee
2016	Jim Lewis Prize winner, best paper in <i>European Urban and Regional Studies</i> 2015 for 'After Florida: Towards an economics of diversity'
2015	RSA: Early Career Award, Evaluating Tech City
2010	LSE Research Studentship Award
2009	ESRC Overseas University Visit Award
2008	ESRC CASE +3 Grant, in partnership with DCLG
1998	LSE Titmuss Prize for outstanding achievement
1995	Oriel College Scholarship, Oxford

PROFESSIONAL SERVICE

Co-organiser, CASA online seminar series, UCL. 2020- . With Jon Reades, Sarah Wise and Adam Dennett

Lead organiser, City-REDI seminar series, Birmingham Business School. 2016-2019. With Raquel Ortega-Arquiles, Andre Carrascal, Pam Robinson and Lisa De Propriis

Co-organiser, City-REDI work-in-progress seminar series, Birmingham Business School. 2017-2018. With Tasos Kitsos, Charlotte Hoole, Chloe Billing, Deniz Sevinc

Peer reviewer for ESRC Open Research Grants, SDAI Open Call; US-Israel Binational Science Foundation; NWO Netherlands Organisation for Scientific Research. Member of the UKRI Future Leaders Fellowships (FLF) Peer Review College

Approved researcher, UK Secure Data Service and ONS Virtual Microdata Lab

Editorial Board, Urban Planning

Referee, *PNAS*, *British Journal of Sociology*, *Social Forces*, *Journal of the European Economic Association*, *Journal of Labour Economics*, *Economica*, *Journal of Economic Surveys*, *Economic Inquiry*, *Human Relations*, *Journal of Small Business Management*, *Journal of Population Economics*, *IZA World of Labor*, *Research Policy*, *Journal of Economic Geography*, *Economic Geography*, *Regional Science and Urban Economics*, *Journal of Regional Science*, *Papers in Regional Science*, *Annals of the Association of American Geographers*, *Environment and Planning A*, *Environment and Planning C*, *Regional Studies*, *Urban Studies*, *Cities Culture and Society*, *Entrepreneurship and Regional Development*, *Urban Geography*, *Journal of Urban Affairs*, *Big Data and Society*, *International Migration*, *National Institute Economic Review*.

PHD / POST-DOC SUPERVISION AND EXAMINATION

Postdoc project management

2019 –2021 Diana Gutierrez-Posada, Tasos Kitsos, Massi Nuccio [PEC projects]

2018 –2022 Juliane Schwarz [Tech accelerator evaluation]

2018 –2022 Capucine Riom, Maria Sanchez-Vidal [BBC Media City evaluation]

PHDs supervised

2021 – Rotem Shevchenko
(Smart) Hybrid Temporary Urbanism as an Urban Curator in the Post Pandemic City: The case of Tel Aviv
Co-supervisor with Lauren Andres (lead) and Mike Raco

2020 – Jennie Williams
Algorithms in the Archive: Mapping Knowledge with Data Science
Co-supervisor with Jon Reades (lead)

PHDs examined

2021 Xiaolun Yu
Essays in Housing Economics
London School of Economics and Political Science
Supervisors: Christian Hilber, Felipe Carozzi

Augusto Rocha
Social capital and networks: networking events enacting knowledge transactions within an entrepreneurial ecosystem
University of Edinburgh
Supervisors: Ben Spigel, Richard Harrison

2017 **Eduardo Ferrucci**
Skilled Migration and Innovation: Three Essays
University of Bordeaux and University of Turin
Supervisors: Francesco Lissoni, Fabio Montobbio

UNDERGRADUATE AND POSTGRADUATE TEACHING

- 2021 –** **UCL, CASA0008 Smart Cities, Context, Policy and Governance**
Module Co-Lead
MSc lectures on urban innovation systems, industrial policy, policy evaluation
- 2020 –** **UCL, CASA0010 Dissertations**
Supervised five MSc 10,000-word dissertations
- 2020 –** **UCL, BASC0010 Understanding Cities and their Spatial Cultures**
Year 2 lectures on urban economics
- 2017-2019** **Birmingham Business School, The Place of Business in Society**
Year 1 lectures on urban economics; automation and the labour market
- 2015** **Imperial College London co-supervisor MSc thesis, (with Dr. Matthew Hannon).** Niko Graspas, “Examining the factors key to the success of innovative ‘smart’ energy startups in the UK”.
- 2010-2012** **LSE, Applied Spatial and Location Analysis**
Year 3 seminars on globalisation, housing markets, peer/neighbourhood effects, spatial mismatch, crime and cities, economics of immigration
- 2010-2012** **LSE GY350 Independent Research Project Adviser**
Supervised five undergraduate dissertations per year
-

RESEARCH IMPACT AND MEDIA

Appearances and op-ed pieces include CNN, NPR, News 24, Sky News, ITN, BBC News, BBC Radio 4 and Radio 5 Live, Financial Times, Guardian, Mirror, Telegraph, Prospect, Huffington Post, Wired, and regional/local/specialist outlets. My research has also featured on the BBC, ITV, Bloomberg, Sky News, FT, Guardian, Observer, Economist, Daily Mail, Times, Telegraph, Independent, Vice, Wired, CityLab, Het Parool and specialist platforms.

I contribute to CASA and UKRI Economics Observatory blogs and have also written for the What Works Centre for Local Economics Growth, City-REDI, LSE British Politics and Policy, LSE Covid-19 and SERC blogging platforms. I also blog at Medium (<https://maxnathan.medium.com/>).

I tweet at @iammaxnathan.

LANGUAGES

English (mother tongue), German (intermediate), French (intermediate)

Stata (advanced), R (basic), Unix / Bash (basic), Python (beginner)

REFERENCES

Henry Overman

Professor of Economic Geography
London School of Economics and Political
Science
h.g.overman@lse.ac.uk

Ian Gordon

Emeritus Professor of Human Geography
London School of Economics and Political
Science
i.r.gordon@lse.ac.uk

William R. Kerr

Professor of Entrepreneurial Management
Harvard Business School
w.kerr@hbs.edu

Anne Green

Chair in Regional Economic Development
University of Birmingham
a.e.green.1@bham.ac.uk