### Impact case study (REF3b)



Institution: University of the West of England (UWE), Bristol

Unit of Assessment: 19 – Business and Management Studies

Title of case study: Informing policy to improve labour productivity

# 1. Summary of the impact

Research at UWE Bristol has informed the productivity-related policies of the South West of England Regional Development Agency and enabled them to form a more focused spatial economic strategy. It influenced and enhanced job creation in strategic industries and locations geared towards growing the economy and flattening the welfare divide. It informed the Welsh Assembly Government's policies to improve Broadband coverage and enable greater online engagement and innovation activities. Also, it informed the preparation of the Sub-Regional Economic Assessment for the West of England and, in turn, the West of England Multi-Area Agreement.

## 2. Underpinning research

Most economics literature has examined labour productivity from an industrial perspective and disregarded the contributory effects of geography and the local context. Our core team of researchers, listed below, include spatial issues and the local context in their firm-level productivity analyses:

- Prof Don Webber, Reader in Regional Economics (2007-9), Professor of Applied Economics at UWE, Bristol (2011-present) and Associate Professor at Auckland University of Technology, New Zealand (2009-11)
- Prof Martin Boddy (2002-present), Pro Vice-Chancellor, Research, Business Engagement and Professional Development since 2010 and Dean at UWE, Bristol (since 2002)
- Anthony Plumridge, Senior Lecturer at UWE, Bristol (1990-present)

Labour productivity, representing the value of output per worker and influenced by a range of factors, is seen as an important measure of how effective a firm's, an area's or a country's workers are. The research, built on a range of pre-existing commissioned reports and published articles, provided an evidence-base to guide policymakers' allocations of resources and can be summarised in three topics:

- 2.1 The determinants of firm level productivity variation across English regions: This was commissioned research for the UK Government Department of Business Enterprise and Regulatory Reform (2008) and the South West Regional Development Agency (2006/7). Application of econometric methods to firm level data merged with data corresponding to distances between Wards yielded results that highlight the relative importance of distances to areas of dense population (Webber et al. 2009)
- 2.2 Productivity in Wales: analysis of the impacts of peripherality on spatial patterns of productivity. This was commissioned research for the Welsh Assembly Government (2009). This research examined spatial differences in productivity across Wales and England as a whole and across sub-regions within Wales. The focus was on the contributory effects of peripherality and accessibility on firm level productivity and their relative importance were revealed through application of econometric techniques, from which flowed guidance on transport and communications policy to enhance productivity (Boddy et al. 2010)
- 2.3 Key Business Sectors: an appraisal of opportunities for enhancing competitiveness and growth through public action in the West of England. This was commissioned research for the West of England Partnership (2009). The research appraised the make-up and functioning of key business sectors in the West of England sub-region and the opportunities for enhancing their competitiveness and growth through public intervention. Firm level econometric analyses compared the productivity of firms in the West of England area with firms across England and revealed the relative strengths and weaknesses of the region. This fed into the sub-regional strategy and provided guidance on how to alleviate productivity



constraints (see Webber et al. 2009c)

### 3. References to the research (indicative maximum of six references)

The research project, 'Determinants of firm level productivity variation across English regions' was funded by the Department of Business Enterprise and Regulatory Reform (£5,000 in 2008) and the South West Regional Development Agency (£7,000 in 2006/7). The research, 'Productivity in Wales: impacts of peripherality on spatial patterns of productivity', was funded by the Welsh Assembly Government (£25,750 in 2009). The research, 'Key Business Sectors: an appraisal of opportunities for enhancing competitiveness and growth through public action in the West of England', was funded by the West of England Partnership (£33,745 in 2009).

- Curry, N. and Webber, D. J. (2012) 'Economic performance in rural England'. *Regional Studies* 46 (3), pp.279-293. ISSN 0034-3404. 10.1080/00343404.2010.505914
- Webber, D.J., Curry, N. and Plumridge, A. (2009a) 'Business productivity and area productivity in rural England.' *Regional Studies* 43 (5). pp. 661-675. ISSN 0034-3404. 10.1080/00343400701874156
- Webber, D.J., Hudson, J., Plumridge, A. and Boddy, M. (2009a) "Regional productivity differentials: explaining the gap," *Papers in Regional Science* 88 (3). pp. 609-621. ISSN 1056-8190. 10.1111/j.1435-5957.2008.00209.x
- Webber, D.J., Boddy, M. and Plumridge, A. (2007). 'Explaining spatial variation in business performance in Great Britain'. *The European Journal of Comparative Economics*, 4 (2) pp.319-332. http://eaces.liuc.it/18242979200702/182429792007040208.pdf
- Webber, D.J., Plumridge, A., Boddy, M., Dowdall, P. and Baldwin, R. (2009c). Key Business Sectors: An appraisal of opportunities for enhancing competitiveness and growth through public action in the West of England. Final report on a study carried out for the West of England Partnership. (Available from UWE)
- Department for Business, Enterprise and Regulatory Reform (2008). The determinants of firm level productivity variation across English regions. Department for Business, Enterprise and Regulatory Reform: London. (Author: Don Webber). (Available from UWE)
- Boddy, M., Plumridge, A. and Webber, D. (2010) Productivity in Wales: analysis of the impacts of peripherality on spatial patterns of productivity. Project Report. Welsh Assembly Government.http://wales.gov.uk/docs/dfm/research/100524productivityen.pdf

#### 4. Details of the impact

All research highlighted in the topics above has impacted on policymakers' decisions. It has led to corporate discussion and policy intervention which affected government policy investments, people's lives and future prospects.

The work has underpinned the South West of England Regional Development Agency's understanding of the South West economy in terms of key sectors, spatial distribution and concentration. The research provided the RDA with a knowledge base of those factors which could be influenced to generate a positive impact on the region's productivity and those over which the agency had little or no control. This was confirmed by the Chief Economist at the South West RDA who stated that, 'This research identified and quantified a range of economic factors influencing the region's productivity gap which influenced strongly the internal debate and decisions about policy and real investments concerned with addressing productivity.' In particular, the research had a significant impact on the development of regional economic policies in respect of distance/time to key markets and agglomeration effects, and impacted on the work of the Regional Development Agency's policy and activity. In this respect, the Director of Strategy at the South West RDA disclosed that 'The work was used by the South West RDA to inform the Regional Economic Strategy and the RDA's own Corporate Plans. The work was reported to the Board and the Executive of the RDA and was an influence on the investment decisions made, using both RDA and EU funds.'

The RDA used the work to develop appropriate interventions on communications, skill

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development, investment and innovation. As our testimonials illustrate, the work influenced the RDA's investment decisions (using both RDA and EU funds) and was often the evidence base for the South West of England Regional Economic Strategy, the South West of England International Trade Strategy, and the South West of England Regional Spatial Strategy.

The research highlighted in topic 1 above identified and quantified a range of economic factors influencing the regional productivity gap that exists across Britain. As our testimonials confirm, the research was disseminated widely amongst local government, business organisations and peers in other regions and central government and influenced and enhanced job creation while flattening the welfare divide. The research was used by the South West of England RDA and the Welsh Assembly Government to actively consider applied interventions in communications (broadband in particular), skills, investment and innovation and underpinned the understanding of the South West and Wales economies as a whole and in its parts (sectors and places). The SW Regional Development Agency policy makers confirmed that the research was disseminated wider afield and across the country and was highly influential and frequently quoted by the media and other bodies to explain and justify development activity at various levels.

The spatial economic analysis research outlined in topic 2 formed an important part of the evidence base for formulating transport infrastructure improvement policies from a productivity-enhancing perspective in Wales and in targeting assistance for areas likely to continue to suffer from geographical isolation. An offshoot of the research was the examination of the impact of "virtual peripherality" in the sense of an absence of Broadband access in certain areas of Wales, which was again commissioned by the Welsh Assembly Government. The Welsh Assembly Government has used this amongst other evidence as the foundation of ambitious policies to improve Broadband coverage in the Principality. Recognition of the value of this spatial economic analysis has led to further recent work funded by the Government for Wales using the peripherality/accessibility model to investigate the impact of varying the toll levels on the Severn Crossings. The spatial economic analysis was conducted in association with Arup consultants who provided traffic modelling. Although not yet in the public realm owing to political sensitivity, the evidence has been used to formulate draft policies ready for adoption in 2015 when control of the crossings passes to the Government for Wales.

The research outlined in topic 3 informed the preparation of the Sub-Regional Economic Assessment for the West of England (collectively the areas of the four local councils of Bath and North East Somerset; Bristol; North Somerset and South Gloucestershire) being undertaken largely 'in-house.' The Sub-Regional Economic Assessment informed, in turn, the preparation of the West of England Multi-Area Agreement. The South West Councils Overview and Review report stated that the research 'assisted the Partnership in clarifying the actions required to deliver one of the main outcomes of the MAA. This was to attract and grow business investment to increase economic growth and competitiveness.'

- 5. Sources to corroborate the impact (indicative maximum of 10 references)
  - **5.1 Testimonial available from UWE** from the former Chief Economist at the South West of England Regional Development Agency
  - **5.2 Testimonial available from UWE** from the former Director of Strategy at the South West of England Regional Development Agency
  - **5.3** South West Councils, <a href="www.swcouncils.gov.uk">www.swcouncils.gov.uk</a>, Taunton, UK. See report:

http://www.swcouncils.gov.uk/media/LAA MAA Programme Overview and Review for web.pdf
This corroborates (at paragraph 3.2.1) the influence of Webber *et al.* (2009c) (cited in section 3 above) on the policies of the South West Improvement & Efficiency Partnership