

Institution: University of Warwick		
Unit of Assessment: C17 Business and Management Studies		
Title of case study: Partnering with policymakers to strengthen SME policy: The Enterprise Research Centre		
Period when the underpinning research was undertaken: 2013 - 31 December 2020		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Stephen Roper	Professor	01/01/2008 - Present
Kevin Mole	Senior Research Fellow	01/11/2001 - 30/06/2015;
	Associate Professor (Reader)	01/07/2015 - Present
Maria Wishart	Research Fellow	01/02/2018 - Present
Period when the claimed impact occurred: 2013 - 31 December 2020		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact (indicative maximum 100 words) <p>The Enterprise Research Centre (ERC) is based jointly at Warwick and Aston University Business Schools and is led by Professor Stephen Roper. Since 2013, the Centre has produced a large body of research focused on understanding what drives performance and productivity in small and medium-sized enterprises (SMEs). This research, much of which has been co-produced with policymakers, has transformed the approach taken by government to measuring SME performance and improving firm-level productivity in the UK. The findings from research carried out by the Warwick team have directly shaped several business policy initiatives, including the Business Basics Programme and Small Business Leadership Programme. It has also shaped government approaches to the allocation of innovation funding for businesses, particularly in response to the Covid-19 crisis.</p>		
2. Underpinning research (indicative maximum 500 words) <p>SMEs (firms with less than 250 employees) make a vital contribution to the UK economy, making up 99.9% of the business population. However, the UK creates many SMEs with limited growth potential/aspiration and has few 'high-growth' firms. The untapped potential of SMEs is a challenge that has captured the attention of policymakers as they have sought to find solutions to the UK's productivity problem. The Covid-19 crisis has brought these issues even more to the fore of policy concerns, as SMEs are recognised as being likely to play a crucial role in economic recovery.</p> <p>Over the past 7 years, the ERC has made a major contribution to knowledge on the behaviour and performance of SMEs. Whilst researchers based at Aston have specialised in business growth and dynamics, the team at Warwick has focused on understanding the drivers of SME productivity, with particular attention to innovation, technology adoption, and management practices. The Warwick team has also played a pivotal role in improving the data used by policymakers on SMEs. Since 2013, ERC Director Stephen Roper has provided strategic leadership on the design of the Longitudinal Small Business Survey (LSBS), an annual government-funded survey of SMEs. The ERC team has also developed its own robust sources of data on the SME population. This includes a ground-breaking survey 'Microbusiness Britain', involving 10,000 micro-businesses (firms with between 1-9 employees that are typically excluded from official surveys) (3.1).</p> <p>Analysis by the team at Warwick has provided valued insights into the drivers of SME performance in several areas. One main area of focus has been on innovation activity in firms.</p>		

This work has explored what drives successful innovation outcomes in SMEs, identifying the range of attributes required such as technical and scientific knowledge, openness to partnership, access to advice and finance. This research has provided evidence on the benefits of cooperation for innovation, particularly between businesses and universities **(3.1)**. Further research has shown a strong positive association between innovation, exporting and performance. Recently, research has turned to look at the likely impacts of the Covid-19 crisis on innovation activity. This work has indicated that we should expect sharp falls in the proportion of innovating firms due to the impact of Covid-19, and that recovery to previous levels will be slow and highly skewed by region and sector **(3.2)**. The ERC has also been commissioned by Innovate UK to undertake a large-scale survey assessing the impact of Covid-19 for current and future innovation behaviour.

A second research focus has been technology adoption in SMEs. Ground-breaking ERC research found evidence that use of digital technologies is strongly linked to sales per employee (a useful measure of productivity). Further analysis has explored the factors influencing technology adoption in SMEs. This found that firms with good networks and collaborative links, and those with stronger internal resources (business plans, training, external finance) are more likely to be digital innovators. It also showed that growth ambition is strongly associated with digital adoption, concluding that digital innovation is positively linked to future business performance **(3.3)**.

A third research theme has been the link between management capabilities/practices and SME performance. Research led by Dr. Kevin Mole found that leaders in high-growth SMEs are more likely to use high-performance work practices (such as performance management and employee engagement). SME leaders use these practices to motivate employees and build trust, thus enhancing business performance. Dr. Mole's research has also demonstrated the importance of leadership skills in enhancing the productivity of small firms **(3.4)**. Other recent research has explored the links between employer approaches to workforce mental health and productivity, finding that firms impacted by mental health-related sickness absence suffer from a drop in their productivity by an average of a quarter.

A fourth area of research has focused on SMEs and external business advice. Research has shown that characteristics such as workforce size and sector have an effect on the uptake of advice, as did those of the owner-manager, particularly education level and gender. An SME leader's own assessments of their ability to tackle business challenges also influences the take-up of external assistance, as does the financial situation of the company and wider economic conditions. This research also showed that there are market failures in business support affecting almost one-fifth of SMEs in the UK **(3.5)**.

A fifth research focus has been the theme of business resilience (which is now especially pertinent given the Covid-19 crisis). An ERC study published in early 2020 involving a major survey of SMEs in 5 European cities found that survival-threatening business crises are commonplace amongst SMEs, but only a minority have any sort of crisis plan in place. The work also found that firms run by women and ethnic minorities are at greater risk of crisis, whilst at the same time less likely to undertake crisis planning and use external business support **(3.6)**.

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

The ERC has published an extensive range of research outputs ranging from substantial research papers and reports to shorter insight papers and policy reviews. Research Papers all undergo formal review with the Centre's Funders before publication. Papers are developed into academic journal publications where appropriate (<https://www.enterpriseresearch.ac.uk/our-work/publications/>).

- 3.1 Hewitt-Dundas, N., Gkypali, A. and Roper, S. (2019) *Does learning from prior collaboration help firms to overcome the 'two-worlds' paradox in university-business collaboration?* Research Policy, 48 (6). pp. 1310-1322.doi:[10.1016/j.respol.2019.01.016](https://doi.org/10.1016/j.respol.2019.01.016)

- 3.2 **Roper**, S. (2020) [*R&D and Innovation after Covid-19: What can we expect? A review of trends after the financial crisis*](#), ERC Insight Paper, May 2020.
- 3.3 **Roper**, S. and Bourke, J. (2018) [*Industry 4.0 is coming: Is digital adoption a new mechanism linking entrepreneurial ambition to business performance?*](#) ERC Research Paper No 72
- 3.4 Peng, B., **Mole**, K and **Roper**, S. (2019) [*Skills, management practices and productivity in SMEs*](#), ERC Research Paper No. 75, April 2019.
- 3.5 **Mole**, K., Baldock, R. and North, D. (2016) [*Which SMEs seek external support? Business characteristics, management behaviour and external influences in a contingency approach*](#). Environment and Planning C: Government and Policy, 35 (3). pp. 476-499. doi:[10.1177/0263774X16665362](#)
- 3.6 **Wishart**, M. and Hopley, L. (2020) *Building resilience in under-represented entrepreneurs: A European comparative study* <https://www.enterpriseresearch.ac.uk/wp-content/uploads/2020/02/BBBR-REPORT-FINAL.pdf>, ERC Research Report, January 2020.

4. Details of the impact (indicative maximum 750 words)

ERC research is used by policymakers at national and local levels, particularly within the Department for Business, Energy and Industrial Strategy (BEIS), Innovate UK, and also by business support organisations working directly with SMEs, such as the Federation of Small Business (FSB), British Chambers of Commerce, British Business Bank and Growth Hubs. ERC research findings are also regularly covered by the media. Between July 2018 and July 2020, the Centre achieved 262 pieces of media coverage across print, broadcast and online media, reaching an estimated audience of 31,000,000 people (5.1). Emphasis is also placed on effective communication with policymakers using a variety of meetings and events. All research publications are shared online via the Centre's website and social media channels.

Most of the ERC's research is co-produced with stakeholders who are involved throughout the research lifecycle, from project design through to completion and dissemination. The ERC team are in regular contact with policymakers and have become regarded as respected advisors and experts, and a source of stable, trusted insight. This has been especially valued in recent years within the context of a constantly shifting business policy landscape and many changes within government (5.2). As the former Head of Policy at the FSB, Sonali Parekh, noted when interviewed as a part of a stakeholder evaluation, *"In my view the ERC are clearly the authoritative repository on a wide plethora of small business issues – with invaluable institutional memory"* (5.3). This trusted expert role has been important in the context of the Covid-19 pandemic, with ERC staff working closely to support policymakers during the crisis. The team have provided highly responsive advice and expertise to help develop strategies for business support during this challenging period, producing a range of research outputs (<http://www.enterpriseresearch.ac.uk/covid-19-resource-directory>).

Looking more broadly over the last 7 years, research undertaken by the ERC team has transformed both the quantity and quality of data available on SMEs. Notably, Professor Roper's advice stimulated new investment by the UK Government in a major national survey of SMEs (the LSBS) in 2015, which was subsequently given official statistics status. As a result of Prof. Roper's insights, the survey methodology was changed to take a longitudinal approach, with businesses re-surveyed in subsequent years. This allowed, for the first time, a detailed analysis to be undertaken of factors that affect SME performance through time, thus vastly improving the quality of the data available to policymakers. This data helped to inform the development of new business support services such as the Growth Hubs in England, local public-private partnerships led by the 38 Local Enterprise Partnerships (LEPs). As BEIS Principal Research Officer Ian Drummond summarised: *"...the ERC played a pivotal role in providing the technical input that underpinned the development of the [LSBS]... It would be difficult to overstate the impact that the development of the LSBS has had on policymaking throughout government. It has provided rigorous evidence on the factors that shape SME performance and growth that previously simply did not exist and in doing so has provided for more considered and better evidenced*

polycymaking" (5.4). The ERC's international 'Micro-business Britain' survey has filled vital evidence gaps, with data used to directly inform policy. The findings have had a particular impact on SME policy development in Ireland, by drawing attention to variations in small business ambition that exist across the country. Prof. Roper, along with co-author Jane Bourke of University College Cork, provided written and oral submissions on the evidence to the Public Consultation Committee on Small and Medium Sized Businesses in Ireland. The Committee's report, published in May 2019, draws on the survey findings to outline a national strategy supporting the growth and sustainability of Irish SMEs (5.5). The report findings were widely reported in the Irish media (5.6).

ERC research insights have also widened the focus of SME policy in the UK. Historically, UK policy related to the performance and growth of SMEs tended to have a narrow focus, with emphasis placed on improving access to finance and reducing regulatory burdens. By highlighting the importance of a range of other factors to SME performance, ERC research has given policymakers a more nuanced understanding that identifies new areas for policy intervention.

For example, Prof. Roper's research has raised awareness of the important role of innovation in SME performance. As BEIS Head of Innovation Policy and Finance Analysis Kyle Magee noted, this research has helped policymakers within government *"to see innovation as something that happens within businesses - not just something that happens in labs or at universities"* (interview with Kyle Magee reported in 5.2). It has also informed the [UK Government's Industrial Strategy](#) in which innovation was identified as 1 of 5 underpinning foundational themes. Roper's research has also influenced decisions about the allocation of innovation funding taken by Innovate UK (the UK's innovation agency). As the previous Deputy Chief Executive of Innovate UK Kevin Baughan commented, *"Enterprise research of the quality being undertaken by the ERC under Stephen Roper's leadership is critical to our understanding of what is actually driving innovation. The ERC's work... has given us a lot of confidence that our investment of public money is achieving its goal"* (5.7).

One key finding to come from the research has been that leading-edge firms attract a disproportionate share of innovation funding. This has prompted discussion within both Innovate UK and BEIS about 'inclusive innovation', which involves better targeting of innovation policy measures to actively reduce inequalities and at the same time stimulate advances in productivity. These discussions about the targeting of funding have risen in priority recently in the light of the Covid-19 crisis, and since March 2020 Prof. Roper has provided regular advice on innovation policy options. He has provided advice to BEIS specifically on the ability of UK universities to support future R&D and innovation post-crisis and has influenced the content of Innovate UK's new 5-year Innovation Strategy. This has involved working directly with the Innovate UK Executive Team, building on pre-existing strong stakeholder relationships. Prof. Roper's insights have helped Innovate UK formulate appropriate evidence-based responses to the crisis. This has included advising on the future investment in several areas (including Catapult Centres - the UK's network of innovation centres) and shaping the submission to the Government's Autumn 2020 Spending Review. As Geeta Nathan, Head of Economics and Insights at Innovate UK, stated in December 2020: *"The input of [Roper], and evidence gathered from ERC, not only informed how we consider our intervention e.g. how we support high growth companies, but also how IUK supports innovative businesses strategically with direct impact on the emerging strategy for the UK's innovative businesses"* (5.8).

The ERC's research has also led to new government investment in a series of initiatives designed to improve firm productivity. As Stuart Roddam, Business and Local Growth Analyst at BEIS, has stated: *"ERC research has added to our understanding of management skills/practices, SME resilience, firm growth patterns and evaluation methodology which has directly influenced the design of the 'Business Basics Programme', the 'Business Productivity Review', our work through 'Be The Business' and the development of the BEIS 'Business Support Evaluation Framework'"* (5.9). Specifically, Prof. Roper's ground-breaking work on digital adoption in SMEs influenced the design of the ['Business Basics' programme](#). This GBP9,200,00

million, 4-year programme was launched in 2018 as a part of the UK Government's Industrial Strategy, and involves testing innovative ways of encouraging SMEs to adopt digital technologies. Prof. Roper's work on digital adoption has also informed the activities of ['Be the Business'](#), an industry-led initiative backed by government launched to help businesses across the UK benchmark and improve their productivity. The organisation has developed a programme to help SMEs take advantage of the productivity benefits associated with adopting technologies, with ERC insights used in the programme design. The 'Be the Business' team is now working with government and other partners on a strategy for mass technology diffusion and adoption in the context of recovery from the Covid-19 crisis, again drawing on ERC research insights and advice.

The UK Government's Business Productivity Review also drew directly on the ERC's research on management and leadership. The policy announcements coming from the Review included a GBP31,000,000 to boost firm level leadership and management through a business-led package of initiatives aimed at driving up firm-level productivity. This included the creation of a Small Business Leadership Programme providing management training to SMEs, with an ambition to train 10,000 people per year by 2025 as well as promoting local networks to focus on business improvement, and a new mentoring programme. This programme has subsequently been re-orientated to give business leaders the confidence and leadership skills they need to ensure business recovery from the impacts of Covid-19. The recognition of the ERC's input into these policy initiatives was acknowledged on the publication of the Review in 2018 by the (then) BEIS Deputy Director for Industrial Strategy, Rannia Leontaridi, thanking the Centre for its involvement and advice (5.10).

As well as influencing national business policy, ERC research has also had an impact at local level. The Centre's research on the links between workforce mental health and productivity has been used to shape the [development of interventions](#) delivered by the mental health charity Mind to help reduce mental health-related sickness absence amongst employers in the Midlands Engine region. The ERC's research on business resilience, which highlighted the need for better crisis planning amongst SMEs resulted in the development of a practical toolkit designed to be used by SMEs to benchmark their resilience and to help develop crisis plans. The toolkit has been developed in partnership with a specialist SME support organisation (Oxford Innovation) who are using it as part of their work to support SME recovery and growth following the Covid-19 crisis. The toolkit has been integrated into a purpose-built diagnostic and recovery planning tool for SMEs and is now being delivered to businesses across three Local Enterprise Partnership (LEP) areas (5.11).

5. Sources to corroborate the impact (indicative maximum of 10 references)

- 5.1 ERC Communications Strategy Evaluation Reports for 2018-2019 and 2019-2020.
- 5.2 *Towards an Intelligence-led industrial strategy: report on ERC stakeholder consultation*, K. Hathaway and V. Belt, April 2016.
- 5.3 Statement from Sonali Parekh, Head of Policy, Federation of Small Businesses (28 August 2019).
- 5.4 Statement from Ian Drummond, Principal Research Officer, BEIS Enterprise Directorate (January 2018).
- 5.5 [Seanad Public Consultation Committee Report](#) on Small and Medium Sized Businesses in Ireland, May 2019.
- 5.6 [Majority of Small Businesses not interested in Scaling](#). Article in Irish Times (3 April 2019).
- 5.7 Statement from Kevin Baughan, former Deputy Chief Executive, Innovate UK (25 January 2018)
- 5.8 Statement from Geeta Nathan, Innovate UK (14 December 2020).
- 5.9 Statement from Stuart Roddam, BEIS Local Growth Analysis Team (28 August 2019).
- 5.10 Statement from Rannia Leontaridi, former Deputy Director for Industrial Strategy, BEIS (01 October 2018).
- 5.11 Oxford Innovation Growth Mapper business recovery tool flyer.