

Institution: University of Glasgow (UofG)		
Unit of Assessment: UoA 17 Business and Management Studies		
Title of case study: Supporting entrepreneurship through policy interventions		
Period when the underpinning research was undertaken: 2013–2019		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s): (1) Colin Mason	Role(s) (e.g. job title): (1) Professor of Entrepreneurship	Period(s) employed by submitting HEI: (1) 2012–present
Period when the claimed impact occurred: 2014–2020		
Is this case study continued from a case study submitted in 2014? No		
<p>1. Summary of the impact</p> <p>Entrepreneurship is widely recognised as an important driver of innovation, wealth and job creation. Mason’s research establishes the conditions under which businesses start and scale-up, and identifies targeted mechanisms to support the emergence of high-growth firms (e.g. angel investors as a key source of finance and knowledge). From 2014 onwards, through engagement with the OECD and EU, and national and regional government agencies, Mason’s research has: (i) informed the supranational policy environment; (ii) directly informed policy within the UK (e.g. the decision not to restrict reliefs for business angels in 2018). Drawing upon the research, Mason has worked with national angel capital associations to shape best practice and inform engagement with policymakers, which has: (iii) stimulated significant investment activity within the UK, Scotland, Canada and Sweden.</p>		
<p>2. Underpinning research</p> <p>2.1. Overview</p> <p>Policymakers across the OECD are strongly focused on promoting high-growth firms (HGFs). The rationale is that HGFs drive growth in productivity, create new employment, increase innovation and promote business internationalisation. However, existing approaches aimed at promoting HGFs are proving ineffective. Firstly, creating favourable environments for business start-ups is not leading to the creation of more HGFs. Secondly, the increasing focus of the venture capital industry on making large investments has created a finance gap for ambitious companies that are seeking to grow. The entrepreneurial ecosystem approach, which recognises that HGFs require distinctive types of supportive environment in order to flourish, has emerged as a response.</p> <p>2.2. Entrepreneurial ecosystems for high-growth firms</p> <p>In 2013, Mason was invited by the OECD to prepare a paper [3.1] (written in conjunction with Professor Ross Brown, University of St Andrews) on the functioning of entrepreneurial ecosystems and their impact on high-growth entrepreneurship (with a journal paper version published in 2017 in <i>Small Business Economics</i>). Mason has also conducted work in Canada on the emergence of entrepreneurial ecosystems (funded by a grant from the Regional Studies Association in 2016). This body of work addresses the need to understand the origins and evolution of supportive environments; to understand how they encourage entrepreneurship and innovation, and to develop appropriate interventions.</p> <p>Mason and Brown [3.1] established that the policy implications are threefold: (i) efforts to stimulate high-growth entrepreneurship cannot be restricted to top-down efforts which simply focus on framework conditions. Bottom-up efforts, involving other tiers of government as well as non-government actors, are also required; (ii) efforts to stimulate HGFs require a distinctive set of policies from those that are targeted at business start-ups in general. Merely focusing policy efforts on increasing the number of new businesses has little effect because extremely few firms achieve significant growth; (iii) policy needs to address the right targets. However, many policy initiatives have been based on myths about the nature of HGFs. Mason’s research with Brown and Mawson (University of Stirling) [3.2] has sought to dispel these myths (e.g. that HGFs are predominantly young, small, high-tech, university spin-outs, which grow in an orderly organic fashion). The research argues that policymakers should move away from the current high-tech fixation to a more inclusive and nuanced view of where these firms originate from. Support for</p>		

HGFs needs to reflect the diverse nature of their business activities, prioritising support for firms with growth ambitions and potential, rather than those with a particular sectoral focus.

2.3. Entrepreneurial recycling, business angel investing and exits

An important driver for the emergence and growth of entrepreneurial ecosystems is the process of 'entrepreneurial recycling'. Entrepreneurs who have built successful companies remain involved in the entrepreneurial ecosystem, reinvesting their wealth and experience to create more entrepreneurial activity. Many will become business angels, providing start-up funding for new businesses and contributing experience through positions on the board of directors. Others become serial entrepreneurs, starting new businesses. The ability of angels to exit their investments in order to reinvest is a further critical recycling process. Mason's research [3.6], focused on the exit stage—the stage at which investors derive their financial gain—and found that while most angels assume that good investments will find an exit, in actual fact, most exits are planned rather than opportunistic. An 'exit-centric' approach is, therefore, key to successful entrepreneurial recycling.

A key research finding is that business angel investors are a powerful source of financing and knowledge for HGFs. Mason has written several state-of-the-art reviews of angel research and policy. He has conducted various studies (with Professor Richard Harrison, Edinburgh University and Dr Tiago Botelho, University of East Anglia) [3.3, 3.4, 3.5, 3.6] that build upon the earlier research of Mason and Harrison (e.g. 2006), which highlighted the role of business angels in strengthening the early-stage ecosystem. The most recent work focuses on the changing nature of business angel investing over the past 25 years. Over this time period, angel investing has evolved from a largely anonymous activity, dominated by individuals, to one that is increasingly characterised by groups of investors working together through managed syndicates.

3. References to the research

3.1. Mason, C. and Brown, R. (2014) [Entrepreneurial Ecosystems and Growth-Oriented Enterprises: Background Paper Prepared for the Workshop Organised by the OECD LEED Programme and the Dutch Ministry of Economic Affairs](http://www.oecd.org/cfe/leed/entrepreneurial-ecosystems.pdf). Discussion Paper: <http://www.oecd.org/cfe/leed/entrepreneurial-ecosystems.pdf>

3.2. Brown, R., Mawson, S. and Mason, C. (2017) [Myth-busting and entrepreneurship policy: the case of high growth firms](https://doi.org/10.1080/08985626.2017.1291762). *Entrepreneurship and Regional Development*, 29(5-6), pp. 414-443. (doi:[10.1080/08985626.2017.1291762](https://doi.org/10.1080/08985626.2017.1291762))

3.3. Mason, C. and Harrison R. T. (2015) [Business angel investment activity in the financial crisis: UK evidence and policy implications](https://doi.org/10.1068/c12324b). *Environment and Planning C: Government and Policy*, 33 (1) pp. 43-60. (doi:[10.1068/c12324b](https://doi.org/10.1068/c12324b)) [Available on request from HEI]

3.4. Mason, C., Botelho, T. and Harrison, R. (2016) [The transformation of the business angel market: evidence and research implications](https://doi.org/10.1080/13691066.2016.1229470). *Venture Capital: an international journal of entrepreneurial finance*, 18 (4), pp. 321-344. (doi: [10.1080/13691066.2016.1229470](https://doi.org/10.1080/13691066.2016.1229470))

3.5. Harrison, R. T., Botelho, T. and Mason, C. M. (2016) [Patient capital in entrepreneurial finance: a reassessment of the role of business angel investors](https://doi.org/10.1093/ser/mww024). *Socio-Economic Review*, 14(4), pp. 669-689. (doi:[10.1093/ser/mww024](https://doi.org/10.1093/ser/mww024))

3.6. Botelho, T, Harrison, R, and Mason, C. (2019) Using the theory of planned behaviour to understand the business angel's exit process: a multi-case analysis, *Small Business Economics*. (Early online publication): <http://link.springer.com/article/10.1007/s11187-019-00292-0>

The following grants have generated research which underpinned impact:

1. ESRC Grant (2012–2013) GBP22,667 (with matched funding from industrial co-funders) for research on 'Early Exit Strategies of Business Angel Investors'.
2. Regional Studies Association (2016–2017) GBP5,000 for research on 'The genesis of entrepreneurial ecosystems - the case of Atlantic Canada.'

This body of work meets the 2* threshold because output [3.1] is a research-based commissioned report for the OECD. Outputs [3.2], [3.3], [3.4], [3.5] and [3.6] are published in international double-blind peer-reviewed entrepreneurship and public policy journals.

4. Details of the impact

4.1. Pathways to impact

Mason's long-term impact strategy has brought international recognition through significant contributions to our understanding of entrepreneurship and the conditions that support the emergence of HGFs. This has directly informed supranational, national and regional policies and practices, as outlined below:

4.2. Informing the supranational policy environment

The underpinning research has informed the policy-influencing communities of the OECD and EU by presenting additional understandings on ways that targeted support mechanisms can promote entrepreneurial activity. For instance, in November 2013, Mason was keynote speaker at an OECD workshop in The Hague, where he presented the highly-influential invited paper [3.1], which has subsequently been cited in 902 related articles according to Google Scholar. In March 2014, Mason presented an invited contribution on 'High-Growth Firm Policies' at the European Commission Conference on Innovation Policies. His research is cited extensively throughout the final report [5A], which stresses the importance of equity finance for policymakers, particularly by private venture capital and angel investors.

4.3. Informing policy within the UK

Building upon this high-level influence, *"Mason's advice and expertise has been invaluable in the implementation of several major policies by the Department of Business Energy and Industry Strategy (BEIS)"* (confirmed by statement [5B]). In 2017, the UK Government embarked on a Patient Capital Review, which investigated the availability of long-term finance for innovative firms. The review made use of Mason's publications [3.2, 3.5], with the former paper deemed important enough to be referenced in the official consultation document published in August 2017 [5C]. Statement [5B] confirms the use of the underpinning research and adds that: *"these papers, coupled with direct submissions provided the review with recognition of business angels as 'smart' investors that are perfect patient investors."*

Mason's research, *"again had a direct impact on government policy in 2018"* [5B]. He submitted a comprehensive and highly-informative submission during a consultation to amend the Enterprise Investment Scheme's fund structure (with the intention of improving the supply of capital to knowledge-intensive companies). This submission was, *"relevant to the decision not to restrict reliefs for business angels"*, as under the Enterprise Investment Scheme, angels are eligible for both income tax and capital gains tax relief (confirmed by statement [5B]). Since the 2017 review, the UK Government has taken significant steps in implementing its Patient Capital Action Plan. For example, it launched [British Patient Capital](#) and a new [Regional Angels Programme](#) in 2018.

The Economic Adviser for Business Finance at BEIS wrote, *"Professor Mason's extensive writings on the VC [venture capital] market and business angels have acted as a highly useful asset for the department. His provision of not only tailor-made submissions to address topics that were of particular interest to BEIS but regular on-hand informal advice has resulted in Professor Mason consistently surpassing his own very high standards for engaging with government on pertinent issues of the day."* [5B].

4.4. Stimulating business angel investment activity in the UK and Scotland

In 2015, an Outstanding Impact in Business Award [5D] recognised the significant contribution of Mason and Harrison's research towards stimulating business angel investment in the UK (a market worth approximately GBP750 million per annum). Mason has worked alongside investor groups to promote the role of business angels to policymakers as a key source of entrepreneurial finance. His research has also fed directly into 'investment readiness' programmes (which help to understand how business angels operate and what they are looking for, so that entrepreneurs can make more effective pitches). This activity has resulted in more

businesses seeking finance from angel investors, and thus more investments being made (confirmed by [short film](#) [5E]).

For example, the Scottish Angel Capital Association (LINC) plays an active role in an angel ecosystem now recognised as among the most developed in Europe. The Chief Executive said, *“Mason has been a leading researcher and influencer in the business angel ecosystem in Scotland and beyond for many years.”* Mason’s research (prior to joining the UofG in 2012) was crucial in introducing and promoting the concept of ‘investment readiness’, resulting in the development of programmes to address the knowledge and skills gap across the UK. The Chief Executive of LINC Scotland confirms that, *“the effectiveness and sophistication of these [programmes] were enhanced by later studies such as...”* [3.4, 3.6]... *“This has undoubtedly contributed to the fact that between August 2013 and December 2018 the annual number of companies funded, and amount invested, almost doubled.”* (confirmed by statement [5F]). With the support of Mason’s research, angel investments in Scotland have increased from approximately GBP27 million in 2013 to approximately GBP64 million in 2018 (figures confirmed by report [5G]).

4.5. Stimulating business angel investment activity in Canada and Sweden

Mason’s research has played a key role in raising the profile of business angels among policymakers and investors in Canada. Mason was invited by the National Angel Capital Organization (NACO) to be lead author of their annual Investment Activity Reports 2015–2019. The CEO wrote, *‘NACO’s annual Angel Activity Reports have drawn distinctly and materially upon Professor Mason’s research and expertise and have recently found that every \$1.00 of angel investment results in \$156.00 in revenue for angel-backed companies, tangibly growing the Canadian GDP. These reports are vital in demonstrating to policymakers the important role that Angels play in Canada’s entrepreneurial ecosystem. With the support of Professor Mason’s policy recommendations in 2017, the Government of Canada created the Women Entrepreneur Fund to support female and indigenous entrepreneurs. This \$30 million fund was fully allocated in 2019 and supported 320 female-led businesses, with six already receiving additional angel investments valued at \$1.5 million.’* (confirmed by statement [5H]).

The Manager for Innovation, Science and Economic Development, Canada, confirms that: *‘NACO’s annual Report on Angel Investing in Canada is the only comprehensive data set in Canada on angel group investment. It plays a valuable role helping government to understand how the financing of the entrepreneurial ecosystem works. It contributes to the evidence that the government needs to develop its programs, such as the support for angel investing that is delivered through Regional Development Agencies’* (confirmed by email [5I]). With support from Mason’s research and the Canadian Government, the number of angel group investments increased from 283 in 2015 (worth approximately CAD133.6 million) to 583 in 2018 (worth approximately CAD142.8 million) [5H].

Beyond Canada, a range of international operators have benefited from Mason’s analysis. For instance, the Chief Executive of LINC Scotland also confirms that, *“operators in Scotland have benefited from analysis at a market level both UK-wide and overseas, giving the ability to benchmark with studies such as [...] the longitudinal annual series for the National Angel Capital Organisation (Canada)”*. Furthermore, from 2015 onwards, Mason was asked to evaluate Swedish co-investment funds and invited to co-author a report on financial exits, which was presented to the Swedish Government in 2017. An Analyst from the Swedish Agency for Growth Policy Analysis wrote, *“Mason’s research was informative in terms of establishing evidence around a gap in the supply of equity capital in Sweden [...] since the presentation of the report it has been a serious interest and [informed] a much more intense discussion about exits in general as well as a more specific discussion about exit-centric approaches and entrepreneurial recycling.”* (confirmed by collated evidence [5J]).

5. Sources to corroborate the impact

[5A] Final report from the SESSION II of the 2014 ERAC Mutual Learning Seminar on Research and Innovation policies – [Final Report](#) [PDF available].

[5B] Statement from the Economic Adviser for Business Finance, Department of Business Energy and Industry Strategy (confirms the influence of Mason's research on UK policy and his role informing the consultation [5C]) **[PDF available]**.

[5C] [Financing Growth in Innovative Firms Consultation 2017](#) (the underpinning research [3.2] is directly cited on p.9 and p.21) **[PDF available]**.

[5D] ESRC Outstanding Impact in Business Award (2015), award and estimated GBP750m figure confirmed by the ESRC webpage: <https://esrc.ukri.org/research/celebrating-impact-prize/previous-years-winners/impact-prize-winners-2015/> **[PDF available]**.

[5E] [ESRC Short Film: Developing business angel investment in the UK](#) **[MP4 available from HEI on request]**.

[5F] Statement from the Chief Executive of LINC Scotland (confirms the role of Mason's research in the increase in angel investments in Scotland from 2013 to 2018) **[PDF available]**.

[5G] [The Risk Capital Market in Scotland Annual Report 2018](#) (figures from p.11) **[PDF available]**.

[5H] Collated evidence: (i) Statement from the CEO of NACO (confirms the influence of Mason's research on policymakers and angel investors in Canada); and (ii) NACO Angel Activity Reports 2015–19 (which confirm Mason's role as lead author and cite the underpinning research; figures used confirmed in p.31 of the 2018 report) **[PDFs available]**.

[5I] Email from the Manager for Innovation, Science and Economic Development, Canada (confirms the valuable role of the angel activity reports) **[PDF available]**.

[5J] Collated evidence: (i) Financial exits: perspectives, regional development and policy interventions. Report for the Swedish Agency for Growth Policy Analysis (Mason's input is recognised on p.5; the underpinning research (e.g. [3.6]) is cited extensively throughout the report.); (ii) Email from an Analyst from the Swedish Agency for Growth Policy Analysis (confirms the influence of the underpinning research on policy debate in Sweden) **[PDFs available]**.