

Economic resilience and entrepreneurship: lessons from the Sheffield City Region

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This article examines the relationship between economic resilience and entrepreneurship in city regions. Resilience is an emerging concept which has been employed to examine economic performance and responsiveness to exogenous shocks such as financial crisis and recession. Drawing on a literature review of academic articles in this emerging field and interviews with policy-makers in the Sheffield City Region of England, the article examines how entrepreneurship is central to sustain a dynamic economy and demonstrates that it is being fore-fronted in policy debates as a key aspect in creating more resilient economies. The article finds that entrepreneurship is integral to promoting the diversification and capacity building of regional economies, traits which are characteristic of (more) resilient economies. We advance the emerging literature through the development of a conceptual framework to highlight the links between economic resilience and entrepreneurship. In doing so, the article argues that entrepreneurship is critical to the restructuring and adaptation of local (city region) economies and draws out a series of recommendations concerning the wider policy implications of the study.

Keywords: economic resilience; entrepreneurship; city regions

1. Introduction

Within the social sciences, the concept of resilience has emerged relatively recently (Davies 2011; Martin 2012), and with no universally agreed definition Pendall, Foster, and Cowell (2010) assert that it is understandably fuzzy. However, the concept has become a popular lens for illuminating regional and local economic change, representing a highly relevant framework to analyse the causes and effects of uneven development in regional and local economies (Foster 2007; Simmie and Martin 2009, Martin 2012). Resilience is attracting increasing interest from academics and policy-makers alike, as local and regional development debates move beyond the hitherto relatively narrow focus on economic growth (Bristow 2010; Davies 2011). This heightened focus on resilience is particularly pertinent in a UK context, following the challenges presented by the financial crisis, economic recession and ensuing government austerity measures (HM Government 2010; HM Treasury 2011).

Parallel to this growing interest in resilience, other strands of academic and political debate have come to recognize the importance of entrepreneurship as an engine of economic growth at national, regional and local levels. Scale is particularly important for understanding the nature of entrepreneurship, as it is clear that there are substantial

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differences in the competitiveness and economic performance of different regions (Porter 2003; Huggins and Williams 2011). As Hudson (2010) notes, localities are competing to develop, attract and retain entrepreneurial people, people who are critical to sustain vibrant and diverse economies (Hospers, Desrochers, and Sautet 2008). Consequently, policy-makers and many scholars view entrepreneurship as a key factor underpinning future trajectories of economic development (Huggins and Williams 2009).

Given this background, the article argues that entrepreneurship needs to be considered as a crucial factor affecting the resilience of economies. While this point has been mooted by Wolfe (2010) who briefly states how entrepreneurial businesses contributed to economic resilience in Ontario, there is limited research which examines the links between the two concepts. This article contributes to the emergent literature on economic resilience by examining the role of entrepreneurship as a facet of regional policy and as an integral piece in the jigsaw of making city regions (more) resilient. Whereas previous work has failed to sufficiently consider the 'role' of entrepreneurship, our conceptual framework highlights entrepreneurship as an important facet of economic resilience. The framework, which is informed by the literature review and in-depth interviews, highlights that while path dependency shapes the development of local economies, entrepreneurially engaged policy can avoid 'lock-in' which may otherwise undermine economic resilience. Path dependencies can be both positive and negative and therefore the effectiveness of policy-making in responding and adapting to a shock can assist in making localities more resilient over time.

Entrepreneurship is therefore an important aspect of resilience in a number of ways: first, small firms are flexible and are therefore able to respond to external shocks; second, they are adaptable as they incorporate changes brought about by shocks; and third, they are able to innovate to fit the new circumstances (Simmie and Martin 2009; Smallbone et al. 2012; Cowling et al. 2014). To this end, our framework and discussion argues that fostering entrepreneurship through effective policy is central in establishing more resilient local economies.

At the outset, entrepreneurship needs to be defined as it means 'different things to different people' (Anderson and Starnawska 2008, 222). We use a broad definition which is appropriate given that it is a multidimensional concept with multiple interpretations by policy-makers. As such, our broad definition encompasses new business start-ups and the responsiveness and flexibility of existing firms, and reflects the development of enterprise policy and different governance arrangements and emphases (Huggins and Williams 2011).

The article is structured as follows. Section 2 reviews the literature on the emergent field of economic resilience, while Section 3 considers the rescaling of regions in the UK and how policy has incorporated entrepreneurship as a facet of economic development. Section 4 sets out the research framework and methodology as well as presenting an overview of the Sheffield City Region (SCR). Section 5 presents the findings of the study in three parts: first, it outlines the economic structure of the SCR; second, it examines the enterprise development policy in response to changes to the structure and third, it outlines the adaptation of the SCR economy. The article then presents and reflects on the importance of entrepreneurship as a part of the framework of economic resilience, before concluding by considering the wider implications for policy-making and academic research.

2. Economic resilience: the region, the firm and the entrepreneur

The concept of resilience has been applied in a wide range of disciplines from ecology to strategic management, focusing on different geographical and organizational contexts, from countries and regions to firms and individuals. The common denominator across all

of these different approaches is how the concept seeks to understand different responses to exogenous changes and shocks (Bharma et al. 2011; Sullivan-Taylor and Branicki 2011; Martin 2012). The exogenous shock at the core of much recent research has been the recent economic crisis which has pushed policy-makers into new ways of thinking about how economic growth may be harnessed. As Dawley, Pike, and Tomaney (2010, 650) note, ‘local and regional development has recently broadened from a preoccupation with growth to one which captures the notion of resilience’. While this article specifically seeks to uncover the linkages between resilience and entrepreneurship, first, it is important to outline theoretical notions of resilience at the regional scale in order to understand the role that entrepreneurship can play in making regions (more) resilient.

As noted earlier, resilience has come to be regarded as an increasingly relevant conceptual approach to study the economic performance of regions, yet there is no universally agreed definition of what constitutes resilience (Pendall, Foster, and Cowell 2010). However, the definitions presented in Table 1 show that there is some consensus among scholars. These definitions also highlight that resilience is a dynamic concept, and demonstrates the evolutionary dynamics and trajectories of regional economies and their differential capacity to adapt over time (Simmie and Martin 2009; Martin 2012). Indeed, resilience has been argued to provide a mechanism to evaluate the vulnerability of regional economies to exogenous shocks, disturbances and stresses in addition to their capacity to creatively and flexibly respond (Pendall, Foster, and Cowell 2010; Simmie and Martin 2009).

While local and regional economies have emerged as a preferred unit for researching economic resilience, the empirical focus often examines the institutional arrangements and infrastructure within the different regions as a means to analyse economic resilience. Pendall, Foster, and Cowell (2010) identify other factors affecting the economic resilience of regions to include the presence of a highly skilled and mobile labour force, formal and informal business (support) associations, and local inter-firm networks and knowledge spillovers. However, it is the entrepreneurial and strategic acumen of economic agents (i.e. firms and individuals), which affects their dynamism and responsiveness in relation to the adaptive cycle. This in turn determines the resilience of regional economies. Without this dynamism, Simmie and Martin (2009) assert that there is a reduction in responsiveness, and regional economies are then less able to adapt to the threat of potential shocks.

Consequently, when an exogenous shock occurs there is a threat that economic development will stall and firms will scale down operations, close or move out of the region. As such, the resilience of a region has come to be regarded as dependent upon its firms (Ponomarov and Holcomb 2009; Demmer, Vickery, and Calantone 2011; Sullivan-Taylor and Branicki 2011). Indeed, the notion of external shocks affecting firms is not new, and

Table 1. Defining resilience.

Dawley, Pike, and Tomaney (2010, 651)	‘the ability of regions to be able to “bounce-back” or “comeback” from economic shocks and disruptions’
Foster (2007, 14)	‘the ability of a region to anticipate, prepare for, respond to, and recover from a disturbance’
Hill, Wial, and Wolman (2008, 4)	‘the ability of a region to recover successfully from shocks to its economy that either throw it off its growth path or have the potential to throw it off its growth path’
Simmie and Martin (2009, 28)	‘a regional economy’s ability to recover from a shock but also to the degree of resistance to that shock in the first place’

they are often linked to other traditional challenges facing firms such as resource scarcity, cash flow and dependence on infrastructure (Storey 1994; Sutcliffe and Vogus 2003). Similarly, the focus on exogenous shocks is not new and recent debate has emphasized the implication of shocks in relation to organizational resilience and how firms adapt to these shocks in order to remain competitive and resilient (Starr, Newfrock, and Delurey 2003; Burnard and Bhamra 2011). Barnett and Pratt (2000) found that firms have the dynamism to process environmental feedback that will overcome external shocks, whereas more rigidly organized firms were found to be more exposed and fragile. To this end, Weick and Sutcliffe (2001) identify four aspects of resilient behaviour by firms, as shown in Table 2, and how responses of firms to these different factors affect their resilience.

The ability and capacity to respond means that entrepreneurship has both short and long-term consequences for local and regional economies, including the creation of employment and wealth, and the stimulation of competition and innovation employment (Mueller, Van Stel, and Storey 2006; Huggins and Williams 2009). Consequently, economies with high levels of entrepreneurship and which are less dependent on large employers and/or the public sector may be considered to be less exposed to exogenous shocks, as entrepreneurial environments are generally regarded as more creative and flexible. This in turn is considered to enhance the innovative capacity which contributes to new firm formation, responsiveness of existing firms and growth (Dawley, Pike, and Tomaney 2010). For this reason, resilience is a concept that resonates with the entrepreneurship literature, focusing not just on the behaviour and coping styles of entrepreneurs but also on the deeper significance of entrepreneurialism to the wider economy. The diversity and flexibility of entrepreneurs represents an integral source of resilience to exogenous shocks and is also critical to an economy's competitiveness and growth more generally.

This literature review highlights the importance of enterprising firms and individuals as sources of economic resilience, competitiveness and growth. We argue that entrepreneurship, and in particular the ability of small firms to respond positively to an external crisis, is in fact central to creating more diversified and resilient economies. Although small firms can be vulnerable to external changes in circumstances over which they have no control, their flexibility and ability to adapt provides an underlying resilience (Smallbone et al. 2012). This adaptability and flexibility are embodied by the innovative capacity and the entrepreneurial capabilities of small firms (Simmie and Martin 2009), which enables successful firms to absorb and respond positively to external shocks.

Such external shocks can present opportunities if entrepreneurs and firms can innovate as they can take advantage of periods of economic and market disequilibrium (Cowling et al. 2014). Smallbone et al. (2012) found that in response to the crisis UK firms have sought to maintain and increase revenue by diversifying and developing new products and/

Table 2. The four dimensions of resilience.

<i>Resourcefulness</i> : the capacity of managers to identify potential problems, establish priorities and mobilize resources to avoid damage or disruption
<i>Technical systems</i> : the ability of managers to ensure that organizational systems perform to high levels when subject to extreme stress
<i>Organizational</i> : the preparedness of managers to make decisions (however counterintuitive these might sound initially) and to take actions to reduce disaster vulnerability and impacts
<i>Rapidity</i> : the capacity of managers to make decisions on threats without undue delay

Source: Adapted from Weick and Sutcliffe (2001).

or services. While not necessarily radical shifts in products and/or services, this agility and capacity to innovate is central to the capacity of small businesses to respond positively to an external shock and foster resilience. The resilience of firms is therefore of paramount importance to how quickly and how effectively a locality will emerge from an economic crisis.

3. Regions, policy and entrepreneurship in the UK context

In the UK, the region has been the preferred scale of economic development policy-making over the past two decades and, therefore, has unsurprisingly emerged as the preferred unit for researching economic resilience. However, policy scales have shifted to Local Enterprise Partnerships (LEPs) from Regional Economic Development Agencies (RDAs). This section outlines the evolution of scale in policy debates and the position of entrepreneurship therein.

The regional approach was designed to drive economic development and improve competitiveness, as well as reducing the disparities that existed within and between regions (HM Treasury 2007b; Pearce and Ayres 2009). Historically, regional economic policy has assumed an exogenous or re-distributive approach towards stimulating growth, for example by attracting activity to lagging regions characterized by high unemployment (Huggins and Izushi 2007). However, such top-down approaches have chiefly been concerned with directly incentivizing economic activity to locate in less competitive regions through 'hard' policy instruments such as financial subsidies (Halkier and Danson 1997; Huggins and Izushi 2007). Yet such approaches have been criticized, with Acs and Szerb (2007) describing how they can culminate in a zero or possibly negative sum game for the national economy with competitive regions cross-subsidizing less competitive regions.

Over time, policy has tended to move away from intervention seeking to support specific industries perceived to be of long-term value to a region or locality (Huggins and Williams 2009), and in favour of creating environments that foster entrepreneurship. However, while Henry, Hill, and Leitch (2003) find that entrepreneurship can be developed in the most economically deprived or lagging regions, there remains debate as to whether and how government policy should promote entrepreneurship (Huggins and Williams 2009). Despite these contrasting perspectives concerning the role of government the importance of policy in creating an environment which allows entrepreneurship to emerge is widely acknowledged. To this end, Mas-Verdu, Baviera-Puig, and Martinez-Gomez (2009) identify how policies aimed at fostering entrepreneurship can be grouped into three broad areas: (1) supply and demand side policies (e.g. technological development, regional development, tailored taxation); (2) education and cultural change (e.g. improved general and enterprise education) and (3) resourcing entrepreneurs (e.g. venture capital, financial support, knowledge capacity).

Rice and Venables (2003) describe the regional disparities within the UK as both significant and persistent, and the challenges this poses for public policy in improving economic performance and reducing regional disparities. Following the election of a Labour government in 1997, regions and regionalism were at the core of the UK policy agenda (Gibbs 1998; Pearce and Ayres 2009). Mueller, Van Stel, and Storey (2006) identify how the introduction of RDAs across England in 1999 saw responsibility for economic development primarily devolved to the region, while other policy initiatives such as the Local Enterprise Growth Initiative were also a catalyst to the spatial devolution of policy (Huggins and Williams 2009). In keeping with the policy shift discussed earlier, Lodge and Mitchell

(2006) state how Labour's regional strategy was based upon addressing the persistent gaps in innovation, skills, labour market participation and income levels.

To this end, the fivefold statutory remit of the RDAs were to (1) further economic development and regeneration; (2) promote business efficiency, investment and competitiveness; (3) promote employment; (4) enhance development and application of skill relevant to employment and (5) contribute to sustainable development. In addition, each RDA adopted a cluster-focused strategy to support key sectors of the economy, of which biotechnology, information and communications technology (ICT) and environmental were the dominant sectors. To achieve these objectives, the RDAs were afforded a financial commitment exceeding £2 billion in 2008–2009 and 2009–2010 (HM Treasury 2007a). However, the regional approach to economic strategy has been criticized for lacking vision and regional distinctiveness, and simply replicating national policy rather than translating it into a regional context (Charles and Benneworth 2001; Peck and McGuinness 2003).

Following the formation of a Conservative–Liberal Democrat coalition government in 2010, it was announced that the RDAs were to be abolished in May 2012. This change was part of wider reform embodied in the coalition's *Strategy for Growth* which also recognized the need to 'maintain a diverse economy that is more resilient to economic shocks' (HM Government 2010, 4). In addition to rescaling policy to reflect the more diverse economic realities of city regions (Clifton 2008), there was an extension in the enterprising focus of regional policy which was centred on the premise of the entrepreneurial society (Audretsch 2009). The responsibility for this policy agenda now lies with a series of 39 LEPs, whereby joint local authority–business bodies promote economic development (HM Government 2010).

The transition from RDAs to LEPs saw a reshaping of policy priorities, both spatially and ideologically, which has sought to increase the intensity of entrepreneurship as a source of competitive advantage. With rebalancing and localism critical to these policy shifts, the LEPs have been positioned as central to the development of strategies to harness economic development which is more resilient to shocks (HM Government 2010). Table 3 highlights how the statutory remit of the former RDAs are broadly consistent with the strategic priorities now set out by the LEPs. The priorities of the LEPs demonstrate greater specificity than the RDAs they have succeeded, and in some cases there has been a refined focus which reflects their more functional economic geographies (Pugalis and Townsend 2013). Notably whereas RDAs had a relatively minor role in skills development it has become a priority of the LEPs, while physical regeneration was an RDA priority LEPs have become more engaged in local infrastructural issues around housing and transport.

Low employment levels, skills and entrepreneurship are key challenges for many of the LEP regions (Huggins and Thompson 2010) and are challenges which can constrain economic development and undermine economic resilience (Dawley, Pike, and Tomaney 2010). The LEP Network (2013) reported that the UK must generate 1.7 million new private sector jobs to offset job losses from the recession and expected public expenditure cuts due to the austerity measures, and that all LEP areas have experienced increases in unemployment as a result of the recession. As such, the need to rebalance (local) economies and harness economic resilience is pressing for policy-makers, and entrepreneurship has come to be regarded as central to this rebalancing.

In summary, this section has outlined the changing scale and focus of economic development policy which has seen entrepreneurship debates become more prevalent. While the RDAs were conceived to reduce regional disparities and promote competitiveness, the evidence suggests that performance remains highly varied. Although some progress has

Table 3. Statutory remit of RDAs and strategic priorities of LEPs.

RDA statutory remit	LEP strategic priorities
Economic development and regeneration	Employment sites and premises Town/city centre and urban realm Issues around Brownfield land
Promote business efficiency, investment and competitiveness	Business development – enterprise (including early stage finance) Business development – trade and export
Promote employment	Business development – innovation Employment sites and premises Employability, worklessness, labour market inclusion
Enhance development and application of skill relevant to employment	Adult/workforce skills
Contribute to sustainable development	14–19 skills Housing Transport Energy, utilities, waste Low-carbon agenda Broadband

been made in terms of improving regional economic performance it was ultimately premised on public sector funding, and despite being positioned as business-led organizations the RDAs ultimately floundered as drivers of the entrepreneurial economy. LEPs were created with the intention to provide the step change that is required to achieve more enterprising and entrepreneurship-led economic development: a change that is necessary to create more diversified, competitive and resilient economies. The remainder of the article seeks to empirically assess how rescaling policy has sought to harness entrepreneurship as an agent of economic growth and an engine of future of economic resilience through an examination of the SCR LEP area.

4. Empirical focus and methodology

The SCR is situated within the Yorkshire and the Humber Region, in the north of England. Comprising nine local authorities it has a population of approximately 1.7 million people and contains the major urban areas of Sheffield, Doncaster, Rotherham, Chesterfield and Barnsley (Sheffield City Region 2006). Following the decline of the SCR as a major centre for coal, steel and manufacturing in the 1970s, the area experienced a prolonged period of decline and stagnation. Yet by the 1990s, efforts had been made to generate sustained economic restructuring premised on changing the orientation of the economic base. The SCR economy aimed to diversify and became more knowledge based while also securing substantial infrastructure investment (Sheffield City Region 2006, 2010a).

The revival of the SCR was, however, largely premised on growing levels of public sector employment, which accounts for c. 32.7% of the workforce, of which the majority is concentrated in the City of Sheffield. This is compounded by low levels of entrepreneurship, and the business to population ratio remains low in the SCR despite some improvement in the early 2000s (Sheffield City Region 2010b). The number of value added tax (VAT) registered businesses grew from 5600 between 2000 and 2007 to 43,675 or from 278 businesses per 10,000 of the adult population to 305 (Sheffield City Region 2010b) yet remains below the England average in 2007 of 419 businesses per 10,000. Such

figures contribute to Sheffield being seen as one of the least competitive city economies in the UK (Huggins and Thompson 2010). The longitudinal picture of enterprise births and deaths per 10,000 people for the SCR is shown in Table 4 and provides much the same picture.

Table 4 shows that the business birth rate in the SCR has been consistently lower than the average for England between 2004 and 2011. Following the beginning of the recession in 2008, the SCR saw a steeper decline than the England average. From 2004 until 2008, the SCR had a positive net change in births and deaths of businesses; however, since 2008 it has been consistently negative. While the England average saw negative results in both 2009 and 2010, it recovered to show a positive balance between births and deaths; suggesting, albeit tentatively, a recovery in the business stock following the recession.

Given the history of the SCR as a former industrial centre which now faces the challenge of restructuring its economy to provide new employment opportunities for its population, the area provides an appropriate focus for research into resilience. As Dawley, Pike, and Tomaney (2010) state, old industrial areas can experience weaker adaptation and protracted decline due to lock-in in lagging regions. Through our focus on the SCR, we examine how an old industrial economy has aimed to restructure to become a more resilient economy.

In order to understand how entrepreneurship has become integral in making localities (more) resilient, the empirical method is twofold: (1) document analysis of the extant literature on economic resilience and (2) in-depth interviews with key stakeholders in the SCR. The document analysis informed the design of the questions for the in-depth interviews, and by a process of triangulation the convergence of evidence ensured the credibility of findings.

The selection criteria for the articles used in the document analysis can be explained as follows. First, we searched for studies using keywords related to economic resilience in peer-reviewed academic journal articles (keywords: economic resilience, SME resilience, adaptation and restructuring). Second, while there is a broader literature which focuses on resilience related to ecology (see, for example, Wagenaar and Wilkinson 2013; Zehra Zaidi and Pelling 2013) we utilized only those articles where the research focused on one or more aspects of our keyword search at some level and in some depth, that is mere mention of the word was not sufficient. Third, the publication of the article had to be from 2000 onwards. This was felt to be an appropriate time frame to ensure inclusion of this emergent field. In total, 22 academic articles met the criteria. The authors, journals and key findings/implications for theory and policy from each of these articles are set out in Table 5.

Document analysis is often used in combination with other qualitative research methods as a means of triangulation (in this case in-depth interviews) and aims to draw upon multiple sources of evidence to seek convergence and corroboration. In doing so, document analysis can provide a confluence of evidence that breeds credibility (Eisner 1991) and allows the researcher to corroborate findings across data-sets and thus reduce the impact of potential biases that can exist in a single study (Bowen 2009). As a research method, document analysis is particularly applicable to qualitative case studies which can produce rich descriptions of a phenomenon (Yin 1994). The articles and documents were analysed to identify key themes related to economic resilience using a constant comparative technique which ensured that coding and generation of themes was consistent and that coder bias could be prevented (Bryman 2012). First, coding was undertaken independently by the authors, with thematic categories identified from each article. Through this, a coding scheme was developed and applied by both authors, and its results

Table 4. Business births, deaths and net change per 10,000 population (2004–2011).

	2004			2005			2006			2007			2008			2009			2010			2011		
	Births	Death	Net change	Births	Death	Net change	Births	Death	Net change	Births	Death	Net change	Births	Death	Net change	Births	Death	Net change	Births	Death	Net change	Births	Death	Net change
Barnsley	35	30	5	33	29	4	32	28	4	36	27	9	31	29	2	27	33	-7	25	28	-3	26	23	3
Doncaster	35	29	6	34	26	8	31	26	5	34	29	5	32	30	2	28	34	-6	26	29	-3	26	27	-1
Rotherham	35	27	8	33	26	7	32	24	8	36	28	8	30	28	1	28	32	-4	25	30	-5	27	24	3
Sheffield	37	32	5	37	31	6	33	30	3	37	34	3	30	32	-2	27	36	-10	26	33	-8	29	31	-2
Bassetlaw	47	37	10	41	35	6	42	32	11	40	33	7	32	34	-2	33	44	-11	28	32	-4	33	32	1
Bolsover	35	27	7	37	29	8	32	22	10	36	26	10	30	24	6	26	33	-7	25	32	-6	23	23	-1
Chesterfield	38	32	6	40	31	9	39	29	10	40	30	9	34	31	3	32	39	-7	29	31	-2	26	30	-3
Derbyshire	62	47	15	65	44	21	57	43	14	62	44	18	46	50	-4	47	64	-17	42	50	-9	42	50	-8
Dales																								
North East	42	34	8	37	32	5	39	30	10	40	31	9	32	34	-3	30	36	-6	28	34	-5	31	29	3
Derbyshire																								
SCR average	41	33	8	40	31	8	38	29	8	40	31	9	33	32	0	31	39	-8	28	33	-5	29	30	-1
England	50	43	6	48	40	8	44	36	8	48	39	9	46	38	8	40	48	-7	40	42	-2	44	38	6
average																								

Source: Business Demography Survey and NOMIS.

Table 5. Key references in the field of economic resilience with summarized findings/implications.

Source	Journal	Key findings/implications
Barnett and Pratt (2000)	Journal of Organizational Change Management	Effective managers initiate strategic 'pre-adaptations' to future crises, thereby using latent threat to generate organizational flexibility and renewal.
Bhamra, Dani, and Burnard (2011)	International Journal of Production Research	Concept of resilience remains essentially constant regardless of its field of enquiry. Organizations should strive to improve situational awareness, reduce vulnerabilities to systemic risk environments and restore efficacy following the events of a disruption.
Bristow (2010)	Cambridge Journal of Regions, Economy and Society	De-contextualized, placeless competitiveness strategies lead to problems of resilience that can be at least partly overcome with respect to more contextualized locally led approaches.
Burnard and Bhamra (2011)	International Journal of Production Research	Conceptual framework of a resilient organizational response and demonstrates how organizations must strive and continually adapt in order to sustain competitiveness and remain viable within uncertain environments.
Cowling et al. (2014)	International Small Business Journal	While immediate effects of shock (recession) are severe, SMEs recover quite quickly; recessionary growth is concentrated among entrepreneurs with the highest human capital; policy-makers should focus on improving access to finance in response to crisis.
Davies (2011)	Cambridge Journal of Regions, Economy and Society	Fiscal stimulus and tightening packages in 2008–2012 are shown to have regional dimensions in many countries but their impact on resilience varies, depending on political decisions and existing institutional frameworks.
Dawley, Pike, and Tomaney (2010)	Local Economy	Dynamic evolutionary approach used to explain local and regional resilience is required. Key challenge for policy is to foster adaptive capacity of firms and 'branching out' of local and regional activities.
Demmer, Vickery, and Calantone (2011)	International Journal of Production Research	Finds commonalities in resilient strategies for SMEs and larger corporations, emphasizing the need to repeatedly 'reinvent' by developing new products, branching into new markets and providing innovative solutions for customers.
Foster (2007)	National Civic Review	Building resilience to one kind of challenge, for example economic decline, may foster resilience to other civic or social challenges.
Hassink (2010)	Cambridge Journal of Regions, Economy and Society	Usefulness of resilience concept disputed due to difficulties of definition and seen as less useful than existing concepts such as lock-in and path dependence.

(Continued)

Table 5 – continued

Source	Journal	Key findings/implications
Hudson (2010)	Cambridge Journal of Regions, Economy and Society	Defines three main dimensions of resilience: the amount of change that a system can undergo while retaining its structure and functions, the degree to which it can reorganize, and the degree to which it can create and sustain the capacity to learn and adapt.
Martin and Sunley (2006)	Journal of Economic Geography	Path dependence and 'lock-in' are place-dependent processes and require geographical explanation. However, the meaning of regional 'lock-in' is unclear, and little is known about why some regional economies become locked into development paths that lose dynamism, whilst other regional economies avoid this danger and are able to 'reinvent' themselves.
Martin (2012)	Journal of Economic Geography	Notion of resilience can usefully be combined with that of hysteresis in order to more fully capture the possible reactions of regional economies to major recessions. These ideas are then used as the basis for a preliminary empirical analysis of the UK regions.
Pendall, Foster, and Cowell (2010)	Cambridge Journal of Regions, Economy and Society	Resilience metaphor poses danger of fuzziness and necessitates careful specification of space and time boundaries in studying resilience phenomena.
Pike, Dawley, and Tomaney (2010)	Cambridge Journal of Regions, Economy and Society	In contrast to equilibrium-based approaches, resilience approach can better capture the geographical diversity, variety and unevenness of development and address questions of what kind of resilience and for whom.
Ponomarev and Holcomb (2009)	The International Journal of Logistics Management	Supply chain disruptions have adverse effect on both revenue and costs. Resilient supply chains incorporate event readiness, are capable of providing an efficient response and often are capable of recovering to their original state or emerging stronger.
Simmie and Martin (2009)	Cambridge Journal of Regions, Economy and Society	Resilience needs to be understood from an evolutionary perspective and is important in examining the long-term adaptability of regional systems. Lack of economic dynamism will lead to reduction in responsiveness to shocks and leave regional economies less able to adapt to the threat of potential shocks.
Smallbone et al. (2012)	International Small Business Journal	Although SMEs are vulnerable to changes in circumstances over which they have no control, they show underlying resilience and a high level of adaptability and flexibility.

(Continued)

Table 5 – *continued*

Source	Journal	Key findings/implications
Starr, Newfrock, and Delurey (2003)	Strategy and Business	Enterprise resilience is ability and capacity to withstand systemic discontinuities and adapt to new risk environments. Resilient firm aligns its strategy, operations, management systems, governance and decision-making so that it can adjust to risk and create advantages over less adaptive competitors.
Sullivan-Taylor and Branicki (2011)	International Journal of Production Research	SMEs have distinctive perspective and approach to resilience and suggest that there are limitations of applying a one-size-fits-all organizational solution (whether managerial or policy) to creating resilience.
Wolfe (2010)	Cambridge Journal of Regions, Economy and Society	Resilient regions engage in collaborative processes to plan and implement change, within the constraints endowed by their existing regional assets, including public and private research infrastructure, and the infrastructure of regional institutions.

were then compared to ensure inter-coder reliability by identifying any discrepancies between the coders so that they could be revisited and agreed. This constant comparative method involves continually identifying emergent themes against the data, and employing analytical induction whereby the researcher identifies the nature of a relationship and develops important themes (Silverman 2000; Bowen 2009). Through this method, a number of first-order themes relating to important aspects of economic resilience were identified. These were then grouped into three second-order overarching themes: the underlying economic structure, the response to the crisis and adaptation over the longer term. The overarching themes represent the key aspects which the literature identifies as being important for fostering resilient economies. In developing these first- and second-order themes from academic articles and policy literature, we ensured that they reflected both theoretical insights into economic resilience and also how policy-makers may be able to respond effectively to external shocks. The key themes emerging from the literature are set out in Table 6.

Understanding why some local and regional economies are more resilient than others is a key question for the social sciences, and as Martin (2012, 28) states ‘a full explanation would need to analyse the reactions and adjustments of both firms and workers at the local level, as well as the reactions of local institutions and policy actors’. As this article is focused on the adaptation and response of policy, rather than individuals, the research contributes to developing explanations through an examination of the views of local policy stakeholders. The themes shown in Table 6 provided the basis of the interview schedule, for which 25 semi-structured interviews were conducted with key stakeholders in the SCR. The stakeholders all had a remit for developing a more resilient and enterprising economy and included representatives of the SCR LEP, the SCR’s city and town councils and Chambers of Commerce as detailed in Table 7.

Table 6. Themes identified through literature.

First-order themes	Second-order themes
Diverse business base reduces impact of crisis Higher levels of entrepreneurship can reduce impact of crisis Levels of innovation influence how firms are able to adapt Effective firms are proactive and reduce vulnerabilities to crisis Skills levels of individuals and firms important for responsiveness Survival rates of firms ‘Lock-in’ can mean that regions get locked into development paths that lose dynamism and mean they are less resilience, while other regions avoid this and are better able to ‘reinvent’ themselves	Economic structure
Policy-makers face numerous choices in midst of crisis: access to finance, business support and help to expand business into wider geographies are important Policy-making must be locally led and consider economic structure and strengths of locality SMEs with high-quality human capital will be quickest to respond SMEs must innovate in order to remain competitive in response to crisis	Response
Successful responses will lead to better adaptation to future crises Policy-makers should seek to create economies which are ultimately stronger than prior to the crisis so that adaptation is quicker in future	Adaptation

Table 7. Stakeholder interviews.

Location	Organization	No. of interviews
SCR	LEP	4
Sheffield	Sheffield City Council Officer	3
	Elected Member	1
Doncaster	Doncaster MBC Officer	2
	Doncaster Chamber of Commerce	1
	Elected Member	2
Rotherham	Rotherham Metropolitan Borough Council	2
Barnsley	Barnsley MBC Officer	2
	Elected Member	2
Bassetlaw	Bassetlaw District Council	1
North East Derbyshire	North East Derbyshire District Council	1
Chesterfield	Chesterfield Borough Council	1
	Elected Member	1
Derbyshire Dales	Derbyshire Dales District Council	1
Bolsover	Bolsover District Council	1
Total		25

Given the political sensitivity of the research and the position of many interviewees in public office, individuals participating in the research remained anonymous. The interviews were undertaken between May and July 2011. The use of in-depth interviews is particularly applicable to policy research since they address objectives concerning contextual, diagnostic, evaluative and strategic issues and provide rich data (Silverman 2000). Moreover the nature of semi-structured interviews meant that a number of issues not on the interview schedule were raised by some respondents, which where relevant were subsequently explored further. Collectively, the interviews provided a comprehensive overview of the economic structure and institutional arrangements across the SCR as well as providing deep insights into the extent to which policy has sought to harness entrepreneurship as a means of improving economic resilience.

5. Findings

The findings are structured around the three overarching themes identified in the document analysis phase: the first outlines the economic performance of the SCR; the second examines responses to the crisis; while the third outlines the long(er)-term adaptation of the SCR City Region economy.

5.1 *The economic performance of the SCR*

Understanding both the historical path and the contemporary economic landscape of the SCR is critical to explain the prospect of enhanced enterprise-led resilience. Many of the stakeholders interviewed stated that the economy had evolved, having moved away from a traditional manufacturing industrial base path to become a more knowledge-intensive economy. At the same time, the industrial manufacturing base of the SCR was widely regarded by the stakeholders as a comparative strength of the region that could and should be built upon. Whereas historically the profile of the SCR was characterized by and reliant upon a small number of large-scale employers, the decline of traditional manufacturing and wider economic restructuring has seen regional lock-in avoided. Despite the SCR

currently being ranked 38th out of the 39 LEPs in terms of its resilience (LEP Network 2013), the consensus among the interviewees was that the diversification of the SCR economy meant the outlook was positive:

The City Region has a more diverse economy now. Previously we were too dependent on a small number of large employers. We have diversified more due to the decline of some of the traditional industries... That decline may have been forced on us by a national decline in manufacturing but we are probably better off for it.

Manufacturing is still important but it doesn't create the jobs it used to. We need to develop businesses in new, high technology industries so that we continue to diversify our economic base.

Despite these views, there was concern among the stakeholders that the SCR was over-reliant on public sector jobs, which means that reductions in public spending, such as those introduced by the Conservative–Liberal Democrat government (HM Treasury 2011), will have a large impact on the area:

We lack a private sector base. More than half of the workforce is in the public sector. That is the challenge.

We have some real strengths, like the Advanced Manufacturing Park, but too many people are still employed in the public sector.

Consistent with the view of the Conservative and Liberal coalition, the stakeholders interviewed emphasized the need to fully consider how public sector job losses could be offset by private growth. Many of the stakeholders stated that public sector spending cuts have had an impact on demand which has stifled the expansion of the private sector, and which has in turn impacted the SCR economy. The interviewees also recognized that tackling these challenges required long(er)-term strategies rather than short-term fixes. Given public sector cuts, such strategies are dependent upon the effective collaboration of the nine local authority areas comprising the SCR as well as with private sector partners, although Shutt, Pugalis, and Bentley (2012) question whether LEPs can facilitate such joint working and collaboration. Yet, the SCR states that there is a 'fundamental need' to make collaborations work so that the public and private sectors can both benefit. The SCR has the aim to 'rebalance the economic base of Sheffield City Region so that a greater proportion of the workforce are employed in the private sector' (SCR 2013, 1). There is recognition among policy-makers that the economic structure of the SCR has been overly reliant on the public sector in terms of employment. As such, a key part of the policy response is to support entrepreneurship so that the private sector can grow and provide higher levels of employment opportunities. If this is not achieved, the dynamism of the city region will be hampered which in the long term will reduce its ability to be responsive and flexible in the face of future threats (Simmie and Martin 2009).

5.2 Response

Dawley, Pike, and Tomaney (2010) assert that path dependency, that is to say how the past shapes the future, can either enable or constrain economic development. The evolutionary path and economic structure of a region is recognized to influence its economic future (Martin and Sunley 2006; Hassink 2010), although Section 5.1 has shown that the SCR has avoided economic decline associated with lock-in. However, the challenge for the SCR is to ensure the 'response' is premised on what Asheim, Moodysson, and Tödtling (2011) refer to as constructing, and realizing regional advantages. Following over a decade of public sector-led growth, the response of the SCR has been to embrace entrepreneurship-

led economic development to reform its economic structure, prioritizing business growth in sectors most likely to impact employment, productivity and innovation.

Harnessing entrepreneurship has been seen as a way of closing the gap between lagging and more affluent localities, and as a method of supporting restructuring through shifts from traditional manufacturing industries towards the service sector. The stakeholders interviewed identified that promoting entrepreneurship in the SCR had been a direct response to the decline of other established industries, rather than a reflection of new entrepreneurial opportunities. As a result while the intention has been to foster entrepreneurial growth in the SCR and there has been an increase in the number of businesses per 10,000 of the population, this is 43% below the average for England. However, while the gap persists between the SCR and the average for England, evidence suggests that it is reducing. The interviews detected some optimism regarding entrepreneurship in the SCR but also the reality that the city region was developing from a low base:

Sheffield had industrial strengths, and while some of these have been built on others have been lost. The city region has never been an entrepreneurial city, and always had big employers and a big public sector, but there is a real feeling is that things are changing.

Public sector employment grew over the last decade and now it is declining it is apparent that we are not resilient. We haven't seen any improvement in start-ups so we are vulnerable so promoting entrepreneurship and the idea of making a job is really important for the economy if we are to respond positively to the challenges we face.

The number of new enterprises has improved a little but we were starting from a low base... There are lots of low and no-growth lifestyle businesses. Our challenge is both supporting start-ups and supporting businesses with potential to grow so that we can become more resilient.

These quotes affirm the earlier portrait of fact that the SCR has not seen growth in the levels of entrepreneurship and highlighted that the size of the public sector has undermined the resilience of local authorities and the SCR as a whole to external shocks. One stakeholder noted 'some areas of the City Region are more resilient and more entrepreneurial than others'. In many senses, the SCR LEP, at least with respect to its enterprise profile, represents more of a 'functional economic area' than an 'arbitrary administrative boundary' than some of its counterparts. The broadly consistent structure and performance of the local authorities has meant that the response of the LEP in terms of enterprise strategy has had somewhat of a galvanizing effect.

Developing a more enterprising and entrepreneurial economy has become the underlying imperative in the SCR, with a view to become more competitive and more resilient. However, despite both LEP and local authority policy to promote entrepreneurship the consensus among the stakeholders interviewed was that the prevailing nature of enterprise support had resulted in the creation of businesses that were likely to make little contribution to the resilience or growth of the SCR:

Business support has been over-saturated... For too long providers have been too target-focused. Supporting 500 businesses is pretty pointless if they do not have the potential to grow.

There has been unprecedented support for entrepreneurship but it has had questionable impacts. We haven't seen an increase in the start-up rates, so we need to look again at what works and what doesn't. We haven't become more resilient because the sustainability of the businesses supported can be questioned.

The stakeholder views reflect a wider concern that many of the businesses supported would not contribute to the economy over time and are likely to be adversely affected by

external shocks as they lack flexibility and the capacity to innovate. Consequently, the seemingly positive response of promoting enterprise and entrepreneurship can in fact inadvertently constrain economic growth and resilience if firms supported lack flexibility (Dawley, Pike, and Tomaney 2010). If a more resilient business base and in turn a more resilient economy is to be developed, the stakeholders recognized the need to move away from the ‘any new business will do’ approach, and instead support what Stam et al. (2012) refer to as ‘ambitious entrepreneurs’ and those businesses with high-growth potential and the capacity to innovate.

While the reprioritization of entrepreneurship as a facet of competitiveness policy is a reflection of the government’s financial austerity programme (Huggins and Williams 2011), at the same time there has been a decline in business support. Accordingly, the rescaling of RDAs to LEPs has come to provide the primary vehicle to support and harness entrepreneurial growth. As demonstrated in the literature review, there are considerable parallels between the priorities of the LEPs and the statutory remit of the RDAs, and the emphasis in the SCR LEP like the former RDA Yorkshire Forward resonates with what Tödtling and Trippel (2013) refer to as ‘path renewal’. An example of this is the emphasis of sectors of the SCR LEP, which has prioritized (advanced) manufacture, a traditional industry and former strength of the city region. In addition, the LEP has identified a series of other sectors highlighted in Figure 1, which by and large are all premised on progressive renewal rather than path creation.

While the SCR has in its early stages prioritized a largely sector-led approach, a number of the stakeholders interviewed recognized that there were challenges in ‘picking winners’ – even winning sectors. The entrepreneurship literature demonstrates the challenges of picking winners by outlining how government agencies do not possess insight into the selection process, and as such there is no reason to think the support will achieve a positive outcome (Desrochers and Sautet 2004). The range of sectors shown in Figure 1 shows a balance of so called ‘core sectors’ capable of ensuring sufficient absolute employment and replacement demand while also supporting the key strengths of the SCR. In supporting this array of sectors, several interviewees made reference to the SCR as an entrepreneurial ecosystem:

While the LEP may have a number of key sectors, in the SCR we need more jobs and better quality of jobs. We need to understand where growth comes from so that we are focused on supporting high growth potential businesses.

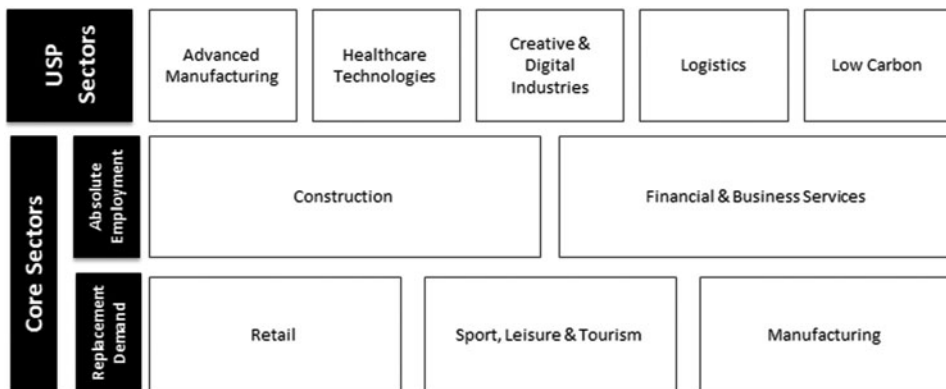


Figure 1. SCR LEP sectors.

And as another interviewee highlighted:

We need to look at supporting more businesses that have the ability to innovate, employ people, and work in developing industries.

The views of the stakeholders demonstrate that policy-makers understand the role which entrepreneurship, and particularly small firms with the ability to be flexible and adaptable, can play in the emergence from a crisis. The stakeholders stated that in the long term the strength of the SCR would be predicated on the ability of its firms to respond positively to the changes brought about by the crisis. As adaptability and flexibility are dependent on the innovative capacity and the entrepreneurial capabilities present within small firms (Simmie and Martin 2009), the emphasis of the stakeholders on the ability of businesses to adapt and potentially innovate will be important as the SCR seeks to navigate out of the crisis.

5.3 Adaptation

Section 5.2 identified entrepreneurship as a key policy response to promote the resilience and competitiveness of city regions. This section examines the adaptation of the SCR. Dawley, Pike, and Tomaney (2010) consider adaptation as the ability of the area to respond to an economic shock and move back towards regional development which may have been successful prior to the shock. However, Pendall, Foster, and Cowell (2010) refer to the need to move to a 'new normal', as returning to the previous 'normal' is undesirable due to a change in conditions. In the case of the SCR, the two principle 'shocks' identified by the stakeholders were the recession and the changes in governance arrangements with the abolition of RDAs and formation of the LEP. These 'shocks' predicate a 'new normal', as it is not possible to return to the previous norm, as the conditions no longer exist. The need for the SCR to adapt is reflected in the LEP strategy, which in outlining its vision stated that the SCR economy has the 'resilience to weather the worst of the recession and to emerge stronger and more dynamic' (Sheffield City Region 2010a, 6). Such statements reflect the desire of the SCR not just to bounce back from the recession, but rather bounce forward to a new normal.

The adaptation of the SCR economy is premised both on harnessing and restructuring existing knowledge and resource in different but related sectors and industries. A distinction between the SCR of the 1970s and 1980s is that while still retaining a comparative strength in manufacturing, there has been a considerable diversification of the industrial base. The stakeholders regarded this diversification as a strength of the SCR which enabled the region to respond to the recession:

The economy is more diverse now and should be able to bounce back from the recession. We have real strengths to build on. As the UK will need to increase its exports to move out of recession that should help businesses in the City Region.

Assets like the Advanced Manufacturing Park will be critical to how we bounce back from recession. We need to build on that success by increasing our exports.

Old industrial regions such as the SCR can experience weaker adaptation due to entrenched path dependency and protracted decline associated with lock-in in lagging regions. However, the views of the stakeholders regarded the industrial heritage as beneficial to its adaptation and diversification. Several of the interviewees compared the economy in the SCR to the neighbouring Leeds City Region, which has experienced economic growth in recent years driven by the financial services industry (Williams and Williams 2010). Some of the stakeholders stated that the path renewal of the SCR

premised on its industrial heritage meant that it was better placed to overcome the recession than other nearby, competing areas such as the Leeds:

Areas like Leeds which have based their economies on finance will struggle to respond as positively to the recession as the SCR.

Financial services will see a decline in the next few years. We have a financial services industry in the SCR but not to the same extent as Leeds, so the problems facing financial services should not hit us as hard.

However, the stakeholders interviewed also identified that a key challenge facing the SCR were the cuts in public spending introduced as part of the government's financial austerity programme (HM Government 2010; HM Treasury 2011). The employment structure of the SCR is characterized by high levels of public sector employment and as such redundancies in the public sector can be seen as a significant secondary effect of the recession and ensuing programme of economic restructuring and rebalancing nationally, but an effect that was particularly acute in the SCR:

Our ability to comeback from the recession strongly will depend on how we integrate the large numbers of people likely to be made redundant back into the economy.

We will need private sector growth to offset the job losses in the public sector . . . Whether the national economy and the SCR economy are strong enough to do that remains to be seen.

While the rebalancing of the economy is premised on of private sector-led growth, this challenge was compounded by the reduction of entrepreneurship and enterprise support as regional Business Link organizations were superseded by the LEP (Thompson, Scott, and Downing 2012). A reduction in the provision and organization of business support occurred as it changed from regional to local, despite the government stating that the LEPs will take on numerous RDA activities (HM Government 2010). However, the approach of LEPs towards business support is radically different from what preceded it, as they have the autonomy to determine, define and deliver support that meets local needs, which in itself represents a significant point of departure from the nationally led regionally delivered support of Business Link. The interviewees expressed mixed views concerning the restructuring from RDA to LEP and the implications for enterprise support:

We are losing some of the structures, like the RDA and we will have a reduced Business Link service, so we need to think about what the priorities are . . . We need to be more innovative and only support those businesses with the most potential.

The abolition of the RDA left a vacuum that the LEP could not fill so the approach had to change. With almost no resources the LEP had to do things differently.

In the case of the SCR, the LEP has established the economic strategy for the local area which is shaped by a combination of austerity and a more bottom-up approach. Given that creating a more enterprising economy underlies the development strategy of the SCR, an important aspect of the LEPs galvanizing function is bringing together businesses and local stakeholders. This in part explains the sector-led approach in the SCR, the response to which has manifested itself in the adaptation of the SCR to become more enterprising and as such more resilient. As another stakeholder explained:

The LEPs need to focus on key industries that will help growth and build an effective supply chain, creating further opportunities for other businesses.

In this respect, the role of the LEP is chiefly as a catalyst or protagonist of reform and reorganization, effectively facilitating or steering the adaptation of the SCR as opposed to driving change as was formerly the case with the RDA. The strategy of the LEP can be understood to simultaneously build on existing strengths and open up new growth

opportunities. The primary role of the LEP in developing the resilience and competitiveness of the SCR is effectively in managing the cross-cutting challenges of adaptation associated with coordinating and brokering relationships with public private and third sector stakeholders, at different scales (i.e. with local, national and European), and different sectors. While the LEP may be seen to orchestrate the strategic adaptation of the SCR by serving as an intermediary and enrolling other stakeholders, many of the challenges are ‘slow burning’ and might take many years if not decades to be reformed and demand a longer term perspective (Simmie and Martin 2009). Yet by promoting entrepreneurship the objective is to create a critical mass of dynamic and diverse businesses in the SCR over the long term, which is vital for regenerating lagging regions and with time will enhance resilience through positive adaptation to external changes.

6. Discussion

This empirical study has explored how city regions are seeking to foster economic resilience. Having discussed the empirical findings in relation to the literature, this section conceptualizes how enterprise-led responses and the adaptation of regions can serve to enhance resilience and competitiveness. While there have been attempts to conceptualize frameworks of economic resilience these have failed to account for and explain the ‘role’ of entrepreneurship. According to Dawley, Pike, and Tomaney (2010), the resilience of a region requires long-term policy objectives and strategies, of which we contend that entrepreneurship represents a central tenet. Moreover, as detailed earlier, promoting entrepreneurship is regarded as crucial to the diversification of economies and their adaptive capacity – traits which are characteristic of (more) resilient economies. Therefore, in conceptualizing economic resilience, this discussion presents a framework that incorporates and explains the significance of assuming an entrepreneurially led approach towards regional restructuring.

Consistent with the work of Martin (2012) and Hassink (2010), the framework of regional economic resilience presented in Figure 2 views the evolution of a region as premised by its historical economic structure (i.e. hysteresis). By distinguishing between the dynamics of resistance and restructuring as responses to economic shock, as shown in Figure 2, three paths are identified: the first relates to the failure/resistance of a region to restructure; the second to traditional policy led regional restructuring and the third entrepreneurially led regional restructuring. These paths can be subject to an intra-shock feedback loop whereby the response is modified and adapted until a consolidated path is realized and integrated into policy and practice – in the case of the SCR this intra-shock is a product of the LEP coordinating and brokering the response with different stakeholders at different scales and with different sectors.

The framework shows that where a region fails to adapt or simply resists the impetus to restructure following an exogenous/economic shock, a lock-in effect will occur and resilience will be undermined. In the inter-shock period, this is likely to culminate in stagnation, if not economic decline of the region, and thereby compromise competitiveness and economic growth. The failure/resistance of a region to restructure might be attributed to ineffective governance as much as it is the capacity of the region itself.

Traditionally, following an exogenous/economic shock the response has been one of policy, or public sector led restructuring, targeting particular sectors or policy domains as shown by path 2a (i.e. Research & Innovation, Transport, Health, Education and Training and so on). Where the response is driven by the public sector (or agencies thereof), as was the case under the RDAs, it represents an attempt at path extension that is effectively

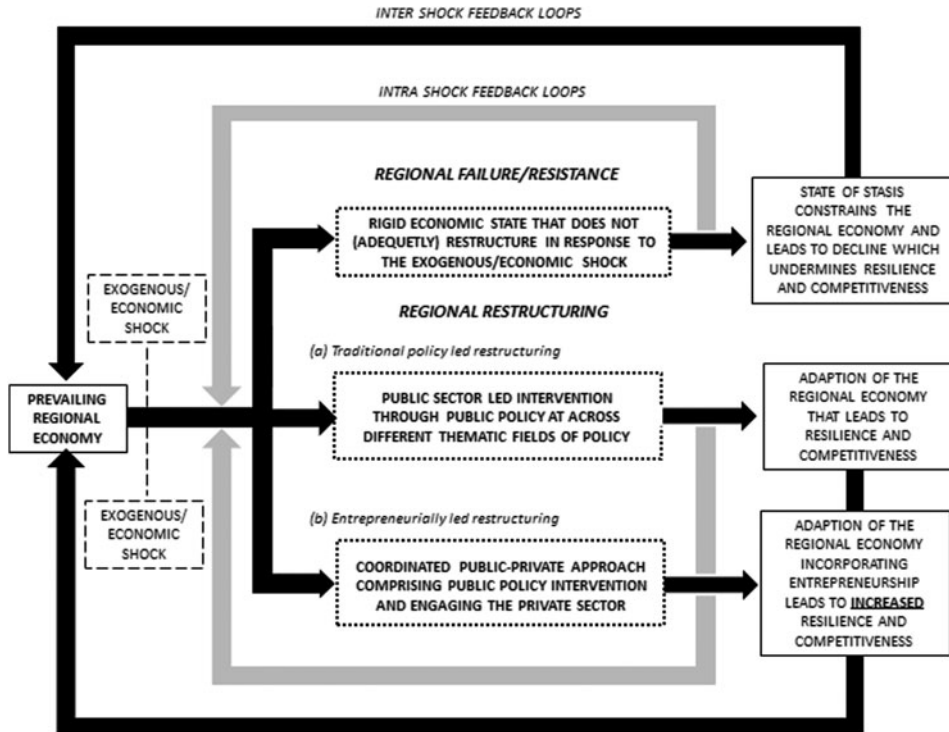


Figure 2. A framework of regional economic resilience.

premised on more of the same. The aim is to return to a pre-shock growth path, where most effective realize positive lock-in. However, unless there is a more balanced approach, as was the case in the SCR in the 1990s, such an approach is unlikely to culminate in long-term sustainable reform. While policy-led restructuring as a response can see regions adapt, it does not necessarily address the underlying structural challenges. In the case of the SCR, the economy was highly dependent on public sector employment, which in the face of spending cuts left the economy exposed and undermined resilience.

The core argument of this article is the need to recognize entrepreneurship as a catalyst for economic resilience and competitiveness as shown by path 2b. To this end, an entrepreneurially led response can be distinguished from more traditional policy-led responses by the virtue of the fact that it is less reliant on the public sector whose role is more facilitative than interventionist. Intrinsic to this approach is the value added as a result of creating the conditions for a more entrepreneurial economy to ensure the longer term strategic adaptation, as well as addressing more immediate challenges. In this instance, the 'slow burn' value of entrepreneurship is not simply the number of business start-ups but as a catalyst for wider socio-economic change culminating in a more resilient economy characterized by greater entrepreneurial diversity and flexibility among firms and individuals. In the case of the SCR, the underlying imperative to develop a more entrepreneurial economy also serves to enhance its adaptive capacity and with it resilience. Indeed, this more entrepreneurial approach renews the existing path by building on existing competences, but also opens the prospect of path creation in new sectors.

Incorporating entrepreneurship into a framework of economic resilience provides a new lens to consider how regions can harness entrepreneurial activity to construct

competitive advantage and challenge prevailing path dependence. Recognizing the significance of entrepreneurship as a response to an exogenous/economic shock and mode of adaptation provides further insight to debates on economic resilience. The framework presented and the preceding discussion highlight how embedding entrepreneurship in regional strategy can provide not only an engine for growth, but also a foundation for enhancing economic resilience.

7. Conclusions

The aim of this article is to further the emergent literature by developing a conceptual framework which outlines the links between economic resilience and entrepreneurship. Entrepreneurship is widely regarded as integral to sustaining a dynamic and diverse economy, by stimulating competition, driving innovation, creating employment and increasing productivity. The framework highlights that while path dependency shapes the development of economies, entrepreneurially engaged policy can avoid 'lock-in' which may otherwise undermine resilience. The theory demonstrates that enterprise, particularly as it relates to entrepreneurs and small firms, is crucial to economic resilience. The ability of entrepreneurs and small businesses to be adaptable and flexible is paramount to their capacity to absorb and respond to external shocks which in turn has a positive impact on the resilience of their locality. However, in more lagging regions, such as traditional industrial areas, weaker adaptation can occur due to embedded path dependency and low levels of existing entrepreneurship.

Through our focus on the SCR, a traditional industrial area with relatively weak economic performance and low levels of entrepreneurship, we have examined how such a locality can emerge and restructure to create a more resilient economy. If such localities are to respond positively to external shocks, this article argues that entrepreneurship needs to be fore-fronted in economic development policy. To this end, three broad lessons can be distilled which have policy relevance not only for the SCR but also wider afield. First, the findings of this study suggest that the shift from RDAs to LEPs as more functional economic areas is important, but it is the LEPs' strategic function as an intermediary in coordinating and enrolling other stakeholders across the public and private sectors that is critical. Second, while there is a need to identify and build on core competencies of regions, there is a need for strategy to look beyond the extension of existing paths to the renewal and creation of new paths. This is not about picking winners, but rather creating conditions which allow entrepreneurship to thrive and contribute to the diversification of economic activity. Third, this article has highlighted the need to ensure that any entrepreneurial response both meaningfully combines and is premised upon public-private partnering. While successive UK governments have provided an abundance of enterprise support, this needs to create the conditions for high(er) growth, flexible and adaptable businesses to thrive rather than increasing the number of start-ups per se.

Finally, although this article has drawn lessons from how the SCR has responded to the shock ensuing from the financial crisis starting in 2008, it has also sought to highlight and develop the concept of entrepreneurship in relation to economic resilience and competitiveness. In identifying this dynamic, the article highlights the need for further research to explore and understand how entrepreneurship can stimulate and enhance economic resilience in different regions. If this article encourages such wider research to be conducted, and therefore a further development of the nature of economic resilience and entrepreneurship both in other socio-spatial contexts, then it will have achieved its broader objective.

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