City-REDI
Policy Briefing Series

CITY REDI

Economic resilience: the role of industrial structure

By Tasos Kitsos

A decade after one of the worst economic crises, the national economy appears to have recovered from its negative impact. However, there is still significant within country variation in the socio-economic performance of places. The notion of resilience emerged to help academics and policymakers consider the differential capacity of places to avoid or overcome a negative shock. With history bound to repeat itself and the challenges of Brexit lying ahead, the lessons arising from understanding local economic resilience are more relevant than ever. This policy briefing focuses on the role of local industrial structures in improving economic resilience.

How can policy influence resilience in local economies?

- Strategic Economic Plans should better understand the input-output relationships and value chains among local industries.
- Once clear of the underlying structures, local authorities can attempt to increase or decrease the level of local embeddedness in order to maximise resilience performance.

Introduction

City-REDI has prepared this brief to inform the debate on economic resilience. It draws on resilience research at the Institute and elsewhere and is prepared under funding provided by the Economic and Social Research Council (ES/S011226/1). It discusses the concept of resilience in political discourse at the national level and then considers the importance of the notion for local areas. The briefing continues in discussing the role of industrial structure characteristics for resilience and the relevant policy implications.

CITY REDI

Policy Context

2008 saw the outbreak of one of the worst and most systemic economic downturns faced by economies around the world. Originating in the housing market and finance sector in the US, the crisis soon spread to different sectors and economies.

However, the crisis affected different economies with varying levels of severity, and some still face the adversities associated with the drop in output and employment.

One of the main policy responses to the recession was identifying its causes and implementing stricter rules on lending and regular testing of the vulnerability of banks. However, economic history has proven that downturns and business cycles are recurring, often for different reasons. As a result, it is equally important to identify how and why some places were better able to offset the crisis impact.

The differential responses of national and local economies to the 2008 crisis has rekindled the interest of academics and policymakers on the concept of economic resilience. Resilience, broadly defined as the ability of a place to overcome or avoid altogether the negative consequences of an economic shock, was able to bring together stakeholders and foster cooperation in creating societies and economies that could mitigate the crisis impact.

More than 10 years on, research, discussion and discourse on how to make a place more resilient slowly making its way in the policy arena. This is due to the realisation that either for historical reasons or due to the challenges lying ahead (Brexit, automation etc), economic crises are historical recurrences rather than singularities.

This policy briefing suggests that economic resilience should be front and centre in academic and stakeholder interest for several reasons.

Firstly, as mentioned before, economic crises are recurring phenomena in time. Thus, whilst it is important to address the causes of each recession, it is equally if not more important to create places that can mitigate the negative forces of a crisis.

Secondly, by understanding what makes a place resilient, it is possible to build better economies and place-based policies that will utilise local assets and characteristics and provide endogenously created good growth.

Finally, with Brexit expected to pose a challenge for local economies, it becomes even more pressing to identify the factors that enhance good growth in different places.

Further to this, the briefing highlights the role of embeddedness in local industrial structures in improving the resilience performance of places.

Regional Context

CITY REDI

Comparing West Midlands' Local Authority Districts to UK

As mentioned before, the national performance across indicators during the crisis can mask significant sub-national variations. The table below shows how local authorities in the West Midlands compare to the UK for three different measures of the 2008 crisis impact (employment, unemployment, Job Seekers Allowance).

Area	Employment	Unemployment	JSA
UK	1.9	2.7	1.6
Birmingham	3.0	5.1	2.1
Coventry	4.7	2.7	1.7
Dudley	3.9	5.2	2.2
Sandwell	3.7	5.4	2.7
Solihull	5.9	3.4	1.9
Tamworth	11.4	8.5	1.8
Walsall	3.5	4.8	2.7
W'ton	5.0	6.4	3.0

Source: Author's calculations from APS data

The figures show the difference between the average rate for the period 2004-2007 and the average of four minimum (or maximum depending on the meaning of the variable) rates for the period 2008-2014. Thus, whilst the UK has lost 1.9% of its employment during the crisis, Birmingham lost 3% and Tamworth 11.4%, the worst performance among all LADs. Similarly, unemployment in the UK has increased by 2.7% during the crisis when the relevant figure for Sandwell is double that.

These figures suggest that the heterogeneity of the crisis impact observed between countries is also present within them, with significant discrepancies in the way different places have performed during the crisis. This makes it even more important for localities to identify the resilience determinants.

What does research tell us?

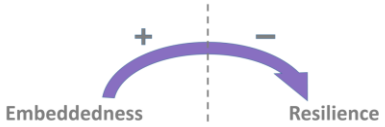
Research on the determining factors behind the varying levels of resilience is emerging. Several of academic contributions discuss the effect of **industrial structures** in the sense of how specialised or diversified they are (Grabner & Modica 2019; Rocchetta and Mina 2019).

However, until our study (Kitsos, Carrascal-Incera et al. 2019) there was no study considering the effects of local economic **embeddedness**, defined by the share of inputs in a local economy that come from within its boundaries.

Increased embeddedness can enhance a places resilience since it provides external economies of complexity and reduces transaction costs. Being physically closer to suppliers means an industry can be more responsive and adaptive to changing conditions.

Simultaneously, being too embedded increases the risks of lock-in and the high interconnectedness means a shock in one sector can quickly become a systemic risk.

Our research finds an inverted U-shaped relationship between embeddedness and resilience where after a point, more embedded systems have lower resilience performance.



Policy Recommendations

CITY REDI

How can policy influence the resilience of local economies?

Our findings suggest the need to better understand the input-output relationships between local industries in order to affect the resilience performance of different areas. In particular:

- Local areas should utilise existing information and complement this to Deep Dives in order to better understand local industrial structures
- Strategic Economic Plans should consider the input-output relationships and value chains among local industries and attempt to harness these relationships to increase the resilience capacity of locations.

Sources

Beer, A. and T. Clower (2014). "Mobilizing leadership in cities and regions." Regional Studies, Regional Science **1**(1): 5-20.

Cabinet Office (2016). A Summary of the 2016 Sector Resilience Plans. C. C. Secretariat. London.

Grabner & Modica (2019). "Industrial Resilience in the United States." Working paper.

Kitsos, A. and P. Bishop (2018). "Economic resilience in Great Britain: the crisis impact and its determining factors for local authority districts." The Annals of Regional Science **60**(2): 329-347.

Kitsos, A., et al. (2019). "The Role of Embeddedness on Regional Economic Resilience: Evidence from the UK." Sustainability **11**(14).

Lee, N. (2014). "Grim down South? The Determinants of Unemployment Increases in British Cities in the 2008–2009 Recession." Regional Studies **48**(11): 1761-1778.

Rocchetta, S. and A. Mina (2017). "Technological Coherence and the Adaptive Resilience of Regional Economies." Papers in Evolutionary Economic Geography **17**.

Tasos Kitsos is a Research Fellow at City-REDI in Birmingham Business School