Mapping Economic Resilience

Tony Greenham, Elizabeth Cox and Josh Ryan-Collins for nef



Further information

This publication and its two supporting documents, *Mapping Economic Resilience: Appendices* and *Mapping Economic Resilience: Literature review*, can be downloaded free of charge from the FPF website (www.friendsprovidentfoundation.org).

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Friends Provident Foundation

Friends Provident Foundation is a grant-making charity working to support greater economic resilience through building knowledge and taking action at the strategic and local levels. It is particularly concerned with supporting the development of models of economic activity that include those who are most vulnerable to market failure. Established as part of the demutualisation of Friends Provident Life Office in 2001 and the flotation of Friends Provident plc, it is independent and has its own board of Trustees. **www.friendsprovidentfoundation.org**

nef

nef (the new economics foundation) is an independent think-and-do tank that inspires and demonstrates real economic well-being. nef aims to improve quality of life by promoting innovative solutions that challenge mainstream thinking on economic, environmental and social issues.

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Further details

Two further publications from this research can be downloaded free of charge from the FPF website (www.friendsprovidentfoundation.org):

Mapping Economic Resilience: Appendices (A table of key organisations is presented in Appendix A, and a suggested resilience indicator framework is included in Appendix B.) *Mapping Economic Resilience: Literature review*

Executive summary

Friends Provident Foundation aims to contribute to the establishment of a fair and sustainable economic system. This report by nef examines the concept of economic resilience as the framing for a new social change programme, and considers how such a programme should be constructed in relation to other organisations and interventions operating in the field. nef's key recommendations are that:

- 1 The definition of resilience should be based on the concept of **dynamic adaptation**, which explicitly incorporates values of **social justice and sustainability**. Implicit within this definition is the concept of **appropriate scale**.
- 2 Friends Provident Foundation sits naturally within a resilience building strategy of increasing the capacity and diversity of local financial institutions. The Foundation could also focus on the financing and governance aspects of four other strategies that are based around: enterprise creation; supporting social capital; supporting personal resilience development; and reducing resource use intensity (increasing the effectiveness of resource use). Opportunities for collaborative working with other funding organisations to support these strategies could also be considered.
- 3 Gaps identified in the current fabric of support for building economic resilience are around **early stage finance**, knowledge, advice and support **tailored towards building resilience** that integrates social and environmental factors, and **place-based coalitions** that implement multiple complementary interventions as part of a coherent framework.

DEFINING ECONOMIC RESILIENCE

Our conceptual definition of economic resilience is 'the capacity of an economic system to adapt in response to both short-term shocks and long-term changes in ecological, social and economic conditions with the aim of supporting the community to thrive whilst using its fair share of ecological resources'. It requires the ability to:

- absorb shocks and retain basic system functionality;
- self-organise (social institutions and networks);
- innovate and learn in response to disturbances.

We define the features of a resilient economy as:

- producing goods and services at an **appropriate scale** to support a balanced and **diverse** local and regional economy;
- adapting to cli mate change by reducing its reliance on fossil fuels, reducing its ecological impact through the environmental transformation of infrastructure (energy, transport and waste), and making more effective use of resources;
- supporting **investment in social as well as financial capital**, which aims to address poverty and inequalities (of income, wealth, time, access and control over productive resources and carbon);
- supporting individuals and groups to experiment, develop and strengthen their adaptive capacities (i.e. self-organising, innovation and learning);
- comprising **structures** (enterprises, public organisations and government) that support people to live the lives that bring them well-being.

MAPPING KEY ORGANISATIONS AND INTERVENTIONS

The mapping exercise identified five strategies to build economic resilience that could be applied at a variety of intervention points (see Figure 4, page 22). We suggest that there are two complementary but distinct ways in which a financial system focused grant programme could seek to address building local economic resilience:

- First, by directly building the capacity of local financial institutions broadly defined to include new models such as peer-to-peer lending, local currencies and mutual exchange mechanisms, community share issues, as well as credit institutions such as community development finance institutions (CDFIs) and credit unions. Importantly, these financial institutions' purpose should be focused on supporting the communities they serve to thrive within ecological limits.
- Second, by developing support for certain specific sectors that are considered key to building local economic resilience (and by implication underpin national economic resilience). Obvious candidates are energy, food, land and housing, and potentially transport and social care. There is an emerging field of social entrepreneurship in these sectors, and all will require patient capital and

building of skills and capacity around financial management, developing investible business models and corporate governance. To further scope this, it would be necessary to examine the 'funding chain' in each sector to identify specific blockages or barriers, as the financial dynamics and business models in each sector can differ markedly.

Some more specific 'gaps' in the field were identified as follows:

Funding for early stage development to support innovation and pilot case studies

There is a need for finance, but the answer is not always grant-funding. There is also a need for patient capital, such as zero or low interest revolving loan funds, and for forms of risk capital, or quasi-equity. It is worth investigating whether it is possible to build capacity in local financial institutions, or to get directly involved in creating integrated 'funding chains' tailored to specific industries. There may be lessons to learn from Big Society Capital and other social investors that offer patient capital, such as Esmée Fairbairn Foundation's Finance Fund, about how similar approaches might be applied at the micro scale.

Advice, knowledge and support

We identified in the mapping exercise that support networks are an important part of fostering local innovation and spreading good practice and knowledge. There is scope for partnerships between place-based funders and other agencies, and national support organisations and funders. There also appear to be gaps in linking together ecological and social imperatives, and in offering support aimed directly at projects and organisations that are focused on different aspects of building local economic resilience.

Bringing different interventions together

The co-ordination of a number of different activities and strategies in the same locality into a comprehensive approach to building economic resilience offers exciting potential, in our view, particularly if this incorporates looking at resilience across the local and regional spatial scales. Further consideration should be given to how to create local 'resilience coalitions' that all work within a shared vision and framework to leverage each other's activities and maximise their impact.

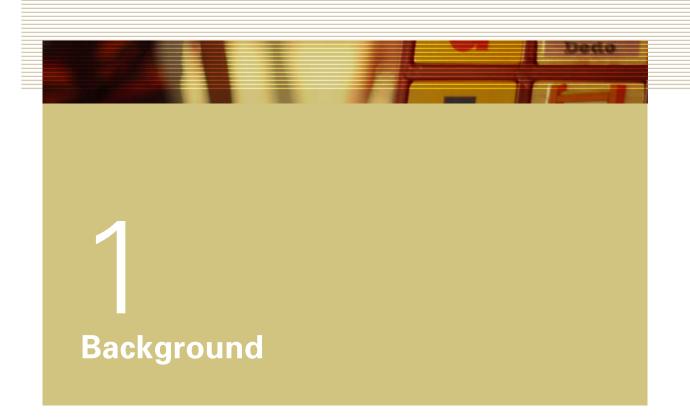
CONCLUDING REMARKS

The concept of resilience, when defined as an adaptive capability, offers a useful framework for addressing economic, social and environmental issues in a systemic way. We believe it is very compatible with the overall approach of Friends Provident Foundation in that:

It is a framework that seeks to address the causes of problems by improving the qualities of the economic system.

- The centrality of the financial system to much economic activity makes this an effective intervention point to build resilience.
- Two of the most important qualities of resilient systems are diversity and adaptability, and this encourages pioneering solutions to the question of the 'right use of investment'.

In addition to further research and discussion on the themes set out above, we consider that it would be useful for Friends Provident Foundation to develop a theory of change that feeds into its strategy and prioritising of interventions. In the context of this economic resilience framework, and drawing on the work in this report, this would address outstanding questions such as the best way to engage with City and national/global businesses to support local economic resilience, and whether single solutions at scale are the only way to effect change, or whether networked multiple micro-scale initiatives, if fostered and supported in an effective way, might ultimately achieve greater impact.



This report was compiled for Friends Provident Foundation by nef to assist its development of a new social change programme. The overarching aim of the new programme is to transform the use of financial systems into an informed activity that delivers social as well as economic benefits and thereby achieve the Foundation's aim of contributing to the establishment of a fair and sustainable economic system.

The Foundation's Trustees have identified two levels at which these aims can be pursued:

- **Macro**: Engaging large corporate bodies in the process of building more resilient economies in the UK.
- Micro: Supporting the development of local economic resilience, building on the technologies and approaches that assist localities to create economic growth and retain its value.

This Foundation's report provides evidence and analysis to support the development of the micro programme, although in practice the findings are relevant to both of the levels described above.

Section 2 offers a definition of economic resilience drawing on the available literature, and considers the key themes that emerge.

Section 3 examines the key organisations and interventions operating at the level of the locality and micro scale.

Section 4 offers some analysis and conclusions about how best to support the development of more resilient local economies, and sets this in the context of broader social and ecological systems.

Further details

Two further publications from this research can be downloaded free of charge from the FPF website (www.friendsprovidentfoundation.org):

Mapping Economic Resilience: Appendices (A table of key organisations is presented in Appendix A, and a suggested resilience indicator framework is included in Appendix B.) Mapping Economic Resilience: Literature review

Defining economic resilience

Summary

In this section we draw on key themes and insights from the literature review. The field of resilience, both in theory and practice, is rich and diverse in its conceptions and manifestations. This is reflected in this discussion, but we also hone down the multiple possibilities into a working definition for Friends Provident Foundation to consider in developing its grant-giving programme. This multiplicity and lack of focus and consensus could be seen as a weakness of the concept, as its 'fuzziness' may be thought to rob it of real meaning or practical utility. However, it appropriately reflects the complexity of human systems and of the real world that we are trying to understand and influence.

RESILIENCE AS AN ADAPTIVE PROCESS

Resilience has been applied as a descriptive quality both of individuals and of systems, including organisations. In exploring the resilience of local economies both of these applications require consideration. A common feature of these qualities is the ability to withstand, cope with or absorb shocks as they arise whilst retaining basic functions. This definition holds closely to the Latin root *resilire*, 'to leap back', and particularly focuses on acute and short-term shocks such as natural disasters or financial crashes.

Three main conceptions of resilience can be identified in the literature:

- single equilibrium or 'steady state' (where forces return the system to an original point);
- multiple equilibrium (where conditions can project a system to different points of equilibrium);
- evolutionary or 'complex adaptive systems' models of resilience (where resilience is a capacity to adapt, rather than a state).

In neo-classical economics the general state of equilibrium of market economies is framed in terms of macroeconomic indicators such as (full) employment, inflation and output. A shock to the system moves the economy off its equilibrium growth path, but self-correcting markets and adjustments eventually return it to a longer-term equilibrium position.¹ The concept has, however, developed beyond an initial focus on systems returning to their original equilibrium state or arriving at a new equilibrium.

The conception emerging from the literature that is particularly applicable to human (socio-economic) systems in the broadest sense is that of an **adaptive or evolutionary process**. This is exemplified in the ability to self-organise, innovate and learn. According to this conception, the most valuable quality of a system is an ability to **adapt** to changing external circumstance or shocks in a way that maintains functionality, including supporting well-being and social justice outcomes, rather than to merely **rebound** quickly to its previous state. This conception allows us to retain a focus on withstanding short-term shocks, but also introduces the idea of adapting to longer-term changes in external circumstances (social, economic or environmental in origin) that may unfold slowly but act as powerful forces on the system. Climate change offers the most potent example of such 'slow burn' factors to which economic systems must be resilient. Adaptation can also be about proactively moving towards a positive social change that is desired.

In measuring a system's resilience (social, economic or ecological), the Tyndall Centre for Climate Change Research (Adger *et al.* 2004) refers to indicators that demonstrate the system's ability to:

- absorb shocks and retain its basic function;
- generate a set of response qualities to that shock that are generally applicable;
 self-organise (social institutions and networks); and

innovate and learn in response to disturbances.²

This definition is particularly useful to guide thinking on the design of approaches to support communities to transform their local economies.

System and individual resilience

Individuals' resilience contributes to their psychological resources, which is one component of well-being. We define an individual's well-being as a 'dynamic process, emerging ... through the interaction between their circumstances, activities, and psychological resources' (Michaelson *et al.* 2009). 'Aside from feeling "good", it also incorporates a sense of individual vitality, opportunities to undertake meaningful, engaging activities which confer feelings of competence and autonomy [and] is also about feelings of relatedness to other people' (Abdallah *et al.* 2009).

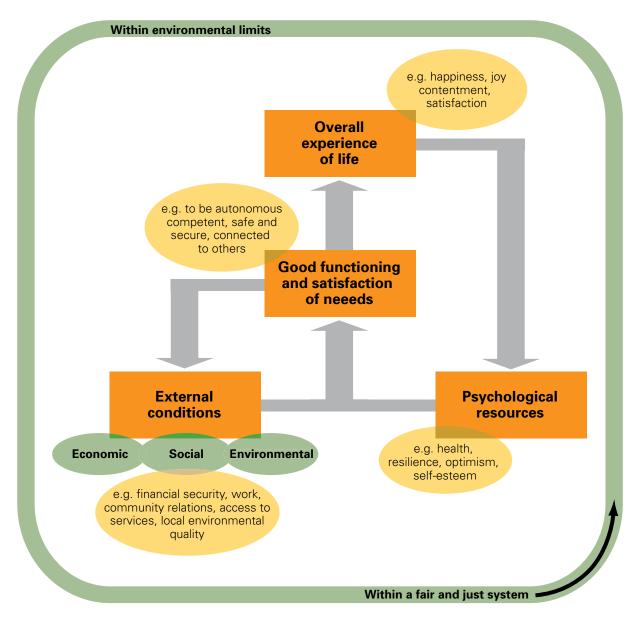
In a report for the Foresight Programme on mental capital and well-being (Thompson and Marks 2008), nef detailed a dynamic model of well-being that highlighted the connection between positive feelings, good functioning, psychological resources and the circumstances of individuals, identifying the reinforcing feedback loops between these elements (see Figure 1).

This dynamic model is built upon decades of well-being research, and identifies several aspects of life that are universally important (Deci and Ryan 2000; Grouzet *et al.* 2005). As far back as 1976 it has been documented in the public health literature that feelings of autonomy and self-competence are important for the development of healthier behaviours (Langer and Rodin 1976). Less well known are the findings of positive psychology researchers such as Barbara Frederickson that show that positive emotions help people build their psychological resources and think more creatively. In other words, fostering well-being can serve as a driver to achieving other outcomes, in addition to being an end in itself.

Of particular interest for economic resilience is the 'feedback loop' from a person functioning well, to them being able to have an impact on their external conditions – which includes having an impact on the economy. Hopkins places personal resilience at the centre of efforts to improve systems resilience: 'community-driven sustainability initiatives must take personal and individual resilience into account and make it a centrepiece of their work' (Hopkins 2010: 359).

FIGURE 1

A dynamic model of well-being showing the connection between positive feelings, good functioning, psychological resources and the circumstances of individuals, and identifying the reinforcing feedback loops between these elements.



Resilience and values

Applied to a system, 'resilience' is in itself a neutral term; it is only a 'good' quality if we approve of the system that is resilient. This makes it important to reveal any hidden assumptions and values when considering resilience as the objective of interventions – might we be shoring up a socially or ecologically undesirable system? Arguably, the global financial system has proven to be resilient in the sense that it was able to return to substantially its original state after the 2008 financial crisis, despite there being no shortage of reform proposals to improve the system's impact on economic stability and social and environmental outcomes. The values question becomes more transparent when using the conception of an adaptive process because this embeds the idea of a dynamic system with an intended direction of travel. This forces us to explicitly consider

where it is we think we want to go and why. As such, any discussion of resilience, particularly in the context of social and economic systems, should recognise that it has both positive and normative elements.

Discussing resilience raises the question 'Resilience to what?' Resilience to one shock, such as an economic crisis, does not mean a system is resilient to a different one, such as climate change. Also to be considered is who is characterising the resilience narrative. For example, Transition Network³ explicitly links resilience to decarbonising (reducing reliance on fossil fuels).

RELATING ECONOMIC, SOCIAL AND ECOLOGICAL RESILIENCE

Resilience is the long-term increase in the capacity to cope with chronic changes in circumstances as well as acute shocks (e.g. unforeseen or periodic hazardous events). Combating climate change regionally and locally will require resilience characteristics to be designed into the structure of the economy. This requires the adaptation of physical infrastructure that underpins the economy (e.g. transport and energy), particularly to reduce environmentally damaging emissions and reduce reliance on fossil fuels. In addition, it requires supporting adaptive capacities (e.g. skills, knowledge, and service infrastructure) within communities.

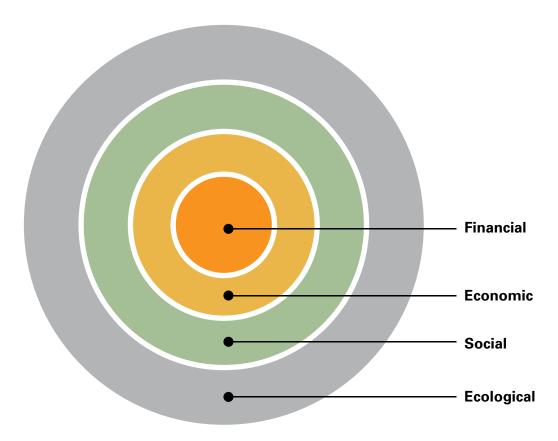
Research by Pelling *et al.* (2008) has shown that adaptive capacity arises out of 'social learning', which is embedded in social relationships. This is based on the theory that social ties of everyday interaction may be a community's best resource in maintaining a capacity to change collective direction. The work provided empirical evidence to support the theoretical arguments for the contribution of relational qualities such as trust, learning and information exchange in building adaptive capacity.

Bartley (2008) explored why some 'deprived' communities are more resilient than others to external shocks, for example a sudden loss of employment opportunities. The findings suggest that it was social capital that held a community together in such circumstances. Edwards *et al.* (2003) connected social capital to well-being through the positive impact of an individual's sense of shared identity and values, and high levels of trust and giving.

The economic system, and the financial system that underpins it, cannot be seen as separate from the environment and the goals of society. We present the economy in Figure 2 as a system bounded by ecological limits and supporting society. This forms the frame by which we will explore the concept of economic resilience. This contrasts with the neo-classical view of economics, where the economy is separate from society, and the environment is not seen to place any limits on the growth of the economy. We add the financial system as a subset of the economic system to give prominence to the pervasive impact of the financial system on economic, social and environmental outcomes.

FIGURE 2

A nested system of mutual dependencies. The economy is part of a larger social system that is bounded by ecological limits.



Resilience and scale

Scale is a key concept in theories of social-ecological resilience. Holling (1973) described adaptive cycles operating at different scales of space and time as a 'panarchy'. Resilience is to a large extent an outcome of this 'panarchy', a concept that can be applied to understand the nature of interactions between local, national and international systems. Adaptation at larger scales is not privileged – adaptation can happen at any scale, but the interaction between the scales of activity can promote or inhibit adaptation. This nested concept becomes important when considering the question of establishing a balance in an economy between globalisation and localisation – or what we might term establishing the principal of appropriate scale. Note that **localisation** of socio-economic activity is distinct from **localism**, which aims to devolve political decision-making without any parallel shift in economic or social structures, such as the scale of businesses or public service provision.

Although adaptation by fast-moving, small-scale local systems may drive change at a larger scale, the reverse may also be true, with interactions between small-scale, fast-adapting local systems and slower-changing national systems inhibiting necessary change. A key example of this is the phenomenon of 'carbon lock-in', whereby a shift from fossil fuel use by individuals, households and local communities is blocked by social, technical and political/institutional barriers that exist at larger scales, regionally, nationally and internationally.

Adaptation at one level may therefore depend on adaptation at a different level. This might be a result of the nature of technologies, for example national integrated rail systems, or it may be the result of a failure to apply the principle of subsidiarity in governance. This principle says that everything is best decided and implemented closest to the people who will be affected. Economic activity should be established at a scale and over an area that maximises social, environmental and economic benefits, and minimises costs.

Criteria for judging where the balance between localisation and interdependence (or globalisation) should lie include:

- actual need (sufficiency);
- the market size needed to achieve adequate economies of scale and quality judged in relation to the impact of these on price and the importance to people's lives, and environmental factors;
- the impact on local economic and social life, particularly with reference to addressing inequality;
- the bioregional characteristics of a producing and trading region. The economy should be aligned with climatic, ecosystems and natural resource characteristics of the area.

Also relevant to the question of balancing localisation and interdependence is the trade-off between efficiency and resilience that is identified in some systems theory literature.

Economics has tended to focus on maximising efficiency with little concern for resilience. However, the significance of the trade-off is that the quality of resilience should not be maximised at the expense of efficiency, or vice versa. Instead there is an optimal level that strikes the best balance between the two.⁴

The focus on efficiency in neo-classical economics is narrow, not just because it ignores resilience, but also because it could be argued that apparent economic efficiency simply masks significant socio-ecological inefficiency elsewhere as evidenced for example by high rates of youth unemployment, or the volume of food waste in developed nations. *The (un)Happy Planet Index* (Abdallah *et al.* 2009) attempts to demonstrate this by calculating the efficiency with which economies translate planetary resources into well-being (long and happy lives).

WHAT DO RESILIENT ECONOMIES LOOK LIKE?

Seven key concepts emerge from the discussion of resilience in the literature that are of particular relevance to building resilient economies.⁵ They can be summarised as:

- 1 **Social qualities**: Economic systems are part of social systems, and therefore supporting personal capacities, promoting human connectedness and social capital, developing trust, social networks, and an ability to self-organise are key.
- 2 Interdependence and localisation: There must be an appropriate balance

between localisation of economic activity and interconnections between different spatial scales and time periods.

- 3 **Diversity**: Diversity in ecological, social, economic and financial systems should be promoted.
- 4 **Innovation**: Learning and experimentation promotes the process of adaptation.
- 5 **Governance**: Access to and control over resources and democratic structures supports the innovation process and the development of social capital.
- 6 **Feedback loops**: At the individual level this means supporting a person's ability to function well, and at the system level this requires information flows as part of the adaptation cycle.
- 7 **Ecosystem services**: A resilient world would consider and assess all the ecosystem services that the economy currently disregards.

These concepts encapsulate the interdependence of economic, social and ecological systems, but to apply them to the specific question of economic resilience we need to consider what the features of a resilient economy are, and how we might recognise and measure them.

Figure 3 reflects these concepts in a working description of the characteristics of a resilient local economy.⁶ These were developed by nef in response to the need amongst local economic development practitioners to operationally apply resilience principles. The characteristics have each suggested resilience indicators to track impact. This framework was further developed by Hodgson and Hopkins (2010) at the grassroots level during the process of community co-creation of the Transition Town Totnes Energy Descent Action Plan, an alternative local economic development plan explicitly based around the concept of resilience that was recognised by the local authority, South Hams District Council, as an important contribution to local planning (see Appendix B).

A WORKING DEFINITION OF RESILIENT ECONOMIES

We suggest this starting point for a working definition of economic resilience:

Economic resilience is the capacity of an economic system to adapt in response to both short-term shocks and long-term changes in ecological, social and economic conditions while supporting the community to thrive within fair ecological limits. It requires the ability to:

- absorb shocks and retain basic system functionality;
- self-organise (social institutions and networks);
- innovate and learn in response to disturbances.

FIGURE 3

Characteristics of a resilient local economy.

Responsible business	A diverse range of responsible businesses and enterprises in terms of size, model (social, private) and the goods and services produced that provide good jobs (in terms of meaningful work, progression, renumeration), respond to local demand, and support a balanced regional economy.
Positive local money and resource flows	High local multipliers in terms of spending and investment locally, and high resource efficiency (waste re-use/reduction).
Asset base and enabling environment	Strong local asset base in terms of attitude, skills, knowledge within the community, access to fair financial services. Access and control over productive resources (physical and natural resources).
Responsive public sector	Working to strengthen and invest in the local economy, and provide good jobs.
Active citizens	Local capacity to act and engage in debate and decision-making in the local and wider area (political voice). Strong levels of social cohesion and shared vision for action. Capability and resilience of individuals across the community. Enterprising behaviours.
Interdependence	Increased understanding of economic, cultural and ecological interconnections that link communities, span the globe and impact on the future. Collaboration within and between communities.
Environmental sustainability	Operating within environmental limits (applied at a local and regional level).

We also recommend that a definition of economic resilience is made operational by providing an answer to the question 'What does a resilient economy look like?' We argue that a resilient economy is one that has the following characteristics:

- producing goods and services at an **appropriate scale** to support a balanced and diverse local and regional economy;
- adapting to climate change by reducing its reliance on fossil fuels, and reducing its ecological impact through the environmental transformation of infrastructure (energy, transport and waste);
- providing support for individuals, groups and institutions to experiment and innovate;
- supporting investment in social as well as financial capital, including addressing poverty and inequalities (of income, wealth, time and carbon);

- supporting the community to develop and strengthen its adaptive capacities:
 - Self-organising: supporting strong social organisations, activism, mutual models of enterprise and collaboration.
 - Innovation: through developing a common sense of purpose and opening up new opportunities to deliver goods and services in different ways.
 - Learning: developing new skills and capacities, and information feedback loops.

Although drafted particularly with local economic systems in mind, this definition is also applicable to national and supra-national regions. Much of the value of resilience thinking is that it emphasises the importance of finding the optimum balance between globalisation and localisation, between efficiency and resilience, and between large and small organisations and interventions. **B** Organisations and interventions

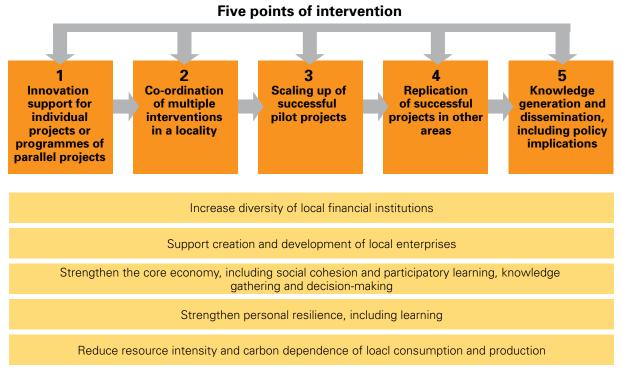
Summary

In this section we review the landscape of organisations and interventions supporting economic resilience (see Appendix A). In some cases these organisation have a stated aim to contribute towards more resilient communities, and in other cases we consider that the nature of their activities is wholly or partly directed at building resilience even if the organisation does not use this terminology.

Organisations are grouped into four functions: funders, knowledge, local government and support. The support section is divided into some key sectors: energy, land and housing, food, community finance and exchange. The finance sector cuts across all the others as a provider of investment, credit and other financial services, and is a necessary component of all other enterprise sectors of the economy.

FIGURE 4

Five points of intervention and five strategies for building economic resilience.



Five strategies for building economic resilience

To try to organise the potential resilience building activities, we have grouped interventions into five 'points of intervention' and five strategies for building economic resilience, which are shown schematically in Figure 4.

It is possible for an organisation to be implementing more than one strategy and working at more than one intervention point. For example:

- **CDFA** is working to increase the diversity of local financial institution by growing, supporting and strengthening the CDFI sector. It acts mainly at the final two intervention points of (4) replication of best practice and (5) research/policy work.
- ClearlySo is supporting the creation and development of local enterprises and (1) supports a programme of parallel projects in different places, (4) is replicating good practice, and (3) is scaling up successful projects.
- Groundwork UK is strengthening the economy by working to make places look better, improving job prospects through training and allowing people to make the best of where they live. They act at levels (1) individual projects, (4) replicating good practice, and (5) research and policy.
- Debt Support Trust is strengthening personal resilience by providing debt advice and support for people struggling to manage their debts. This is (1) a programme of support for many individuals across different localities.

Making Local Food Work is reducing resource intensity and carbon dependence of local consumption and production by acting at (1) providing advice and support to community food enterprises across England and (4) replicating good practice.

We discuss further some of categories of organisation and sectors below.

ORGANISATIONS BY FUNCTION

Funders

Our intention is not to replicate the knowledge that Friends Provident Foundation will itself have of the grant funding sector in the UK, but for completeness we have included key grant funders that either explicitly or implicitly address economic resilience through one or more of their programmes. Social impact investors bringing innovation and patient capital into the sector may play a more important role over time, particularly as Big Society Capital makes available additional resources to social impact investing intermediaries.⁷

Potential exists for funders with different areas of focus and expertise across the various points of intervention to collaborate more to create a 'funding chain' for projects/ innovations that have changing financial and support requirements as they grow and develop. This point is explored further below in the mapping of intervention points and resilience building strategies.

Knowledge organisations

Research institutions and think tanks complement the work of support organisations by generating original research, disseminating knowledge and assessing the impact of initiatives. They do not usually offer direct practical help to grassroots initiatives, although there are some exceptions such as nef's Community Currencies in Action project, funded by the European Union, and Tudor Trust, which offers assistance in training and know-how to communities wishing to set up a local currency. These organisations can potentially provide the ability to scale the impact of local projects by supporting the replication of successful models and best practice across multiple locations. This might be a promising area of activity for Friends Provident Foundation, combining its national charitable scope with activities that build local resilience. If conducted in partnership with placebased funders, local authorities and public agencies this could allow Friends Provident Foundation to provide the 'glue' between the patchwork of innovation and pioneering practices emerging at a small scale within local economies.

Local government

Although local government is not a constituency that would receive grants, it has the opportunity to shape a supportive policy environment in local areas, and in so doing promote the space for innovative locally driven action to emerge.

Haringey Borough Council provides an example of a local authority supporting a resilient economy to emerge across the borough through its approach to multiple interventions. Their *Carbon Commission Report* (Cox and Sherlock 2012) identified six complementary interventions to reduce reliance on fossil fuels and carbon emissions, create new enterprises that re-invest wealth back into the borough and strengthen community organisations:

- an alternative energy supply mutual;
- an energy-retrofitting co-operative network made up of small local businesses;
- the take-up of low carbon transport;
- Iow carbon innovation labs to drive innovation in technology, financial models and social action;
- strengthening community organisations;
- supporting sustainable enterprise.

An intriguing example of how public sector procurement can be used to drive local enterprise development and build economic resilience is provided by the case of the Evergreen Cooperatives in Cleveland, USA (see box on page 25).

The example of Evergreen Cooperatives demonstrates the potential of a co-ordinated multi-intervention approach developed by a partnership of institutions. The security of sales contracts can make start-up mutual enterprises bankable, thereby reducing the need for grant funding at the early stages.

Support organisations

Support organisations contribute to building local economic resilience in two key ways. They can capture knowledge and good practice from successful local projects and disseminate it across local communities. This can speed up implementation of projects, increase the chances of success and scale up and replicate successful models. However, they also encourage diversity and experimentation though being structured as networks with autonomous decision-making at local level.

Activities include training courses and materials, dissemination of advice and knowledge, linking and signposting to useful information and other organisations, providing a way for groups to get in touch with one another to share learning and experience. They may also have a secondary function of advocacy on behalf of their constituents.

Of all the organisations reviewed, Transition Network gives the most prominence to the concept of resilience, using it as a key framing message to attract participants, and as an organising principle. Funding sources are generally from grants, with some degree of self-generated income. Interaction directly with the financial sector has been minimal by these organisations, although Transition Network has become much more focused on encouraging enterprise formation through its REconomy project in areas where transition towns are operating.

Evergreen Cooperatives, Cleveland, USA

Launched in 2008 by a working group of Cleveland-based institutions (including the Cleveland Foundation, the Cleveland Clinic, University Hospitals, Case Western Reserve University, and the municipal government), the Evergreen Cooperatives Initiative is working to create living wage jobs in six low-income neighbourhoods (43,000 residents with a median household income below \$18,500) in an area known as the Greater University Circle (GUC).

The Evergreen Cooperatives offer an approach to successfully turning the mainstream spending, particularly of large institutions such as hospitals and universities, into sustainable local employment generators for low income neighbourhoods in cities. With a strategy focused on catalysing a network of green new businesses that are owned by their employees, rather than concentrating on workforce training, Evergreen Cooperatives take an enterprise approach by first creating the job opportunities, and then recruiting and training local residents to take them.

Focusing on environmentally sustainable energy and green collar jobs, Evergreen initiatives also help institutions to reduce their carbon footprint. For example, Evergreen Energy Solutions (E2S) designs and installs PV solar panel arrays for institutional, governmental and commercial markets. E2S also provides energy efficiency and home performance services for residential and commercial buildings. It is estimated that after approximately eight years, a typical Evergreen worker-owner will possess an equity stake in their company of about \$65,000. The Evergreen Cooperative Laundry, established in 2009, is the greenest commercial-scale health-care bed linen laundry in Ohio. Working at full capacity, it cleans 4,500 to 5,500 tons of health care linen a year and employs 50 residents, whilst having the smallest carbon footprint of any industrial-scale laundry in north-east Ohio – achieved through water and energy efficient technology.

See www.evergreencooperatives.com

ORGANISATIONS BY SECTOR

There are sectors of the economy that have particular importance for resilience as they address basic human needs that impact on the quality of people's day-to-day experience. In the review we particularly highlight organisations supporting energy, land and housing, food, and community finance and exchange. The categories are not mutually exclusive; for example, Transition Network's REconomy project aims to foster new sustainable social enterprises across several sectors that are key to re-localisation of consumption and production, decarbonisation of supply chains, energy, housing and food production. Groundwork UK also supports business development and local food projects, and Plunkett Foundation gives expert advice to communities wishing to run their local shops, pubs and other rural community-owned businesses.

Below we highlight two sectors to draw out lessons for supporting resilience.

TABLE 1

The Community Land Trust (CLT) Fund 'funding chain' provides funding that is intended to grow and develop with projects.

	Feasibility fund	Technical assistance	Pre-development	Development finance
Summary	One day of support to help you scope a project	A small grant to fund initial costs	Funding your project prior to planning permission	Funding the costs of construction
Who is it for?	Community groups keen to tackle affordable housing needs in their community	Organisations that meet, or are working towards meeting, the legal definition of a CLT and have definite ideas about an affordable housing project but require both additional expertise and small amounts of cash to progress the project further	Organisations that have an outline plan for a housing project but lack funds for pre- development work such as paying for the planning process, appointing architects and conducting site surveys	Organisations that have a business plan, designated land with planning permission and fully costed plans for an affordable housing project but lack commercial funds to finance the building work
What funding is available?	One day of guidance and support from an expert in Community Land Trusts	Up to £5,000 to buy in professional or technical advice on issues such as community engagement and membership, legal and governance, financial and procurement issues	Up to £4,500 per unit of housing, to fund the costs of working up a development proposal for submission of a planning application, procuring construction and raising further finance for the project	About £30,000 per unit of housing loaned to you, and secured by at least a second charge over the land and buildings

Source: Community Land Trust Fund (www.cltfund.org.uk/how-to-apply).

Land and housing

In the land and housing sector the Community Land Trust (CLT) Fund provides an interesting model of a 'funding chain' of linked forms of funding that are intended to grow and develop with the projects. Small grants are available for feasibility studies and technical assistance. Quasi-equity is provided for the pre-planning permission phase. Successful projects repay funding with a 25 per cent premium to replenish the fund and to cover the non-repayment by unsuccessful projects. Once the business becomes 'investible', initially by increasing value of the land with planning permission, debt finance can be accessed.

Finance

Locally focused financial institutions are a small component of the financial system within the UK in comparison with other nations (Prieg and Greenham 2012). Financial institutions with a specific geographical focus include credit unions, community development financial institutions (CDFIs) and smaller building societies. These types of institution also have explicit social goals rather than being purely profit-maximising businesses. In addition to operating in disadvantaged areas where there is a lack of provision from mainstream banks, these local financial institutions add diversity in the finance system – a key quality of economic resilience – and keep more resources circulating within the local economy. In addition to providers of credit and payment services, there is a growing interest in locally directed equity investment (e.g. community shares), and local currencies (e.g. Brixton pound). There is a growing range of small-scale financial innovations taking place, driven by enabling technologies and entrepreneurial responses to the financial crash of 2008, and chronic underserving of sectors of the economy by the mainstream banking sector (e.g. crowd funding mechanisms such as Buzzbnk).

Locally directed equity investment is often in the form of the issue of shares in industrial and provident societies, which allow a co-operative governance structure (one person, one vote) alongside the ability to pay a financial return in proportion to investment. The primary sector for these has been renewable energy production with examples in Brixton, Bath, Totnes and Lewes amongst others. The Co-op has also set up the Community Shares Fund to provide bridging loans and underwriting for community share issues.

IMPLICATIONS

What emerges from this is that there are two complementary but distinct ways in which a financial system focused grant programme could seek to address building local economic resilience:

- First, by directly building the capacity of local financial institutions broadly defined to include new models such as peer-to-peer lending, local currencies and mutual exchange mechanisms, community share issues, as well as credit institutions such as CDFIs and credit unions.
- Second, by developing support for certain specific sectors that are considered key to building local economic resilience (and by implication, national economic resilience too). Obvious candidates are energy, food, land and housing, and potentially transport and social care. There is an emerging field of social entrepreneurship in these sectors, and all will require patient capital and building of skills and capacity around financial management, developing investible business models and corporate governance.

Conclusions and recommendations

Summary

In this section we draw together the findings of the review of literature and interventions to identify some key considerations for developing an effective grant programme centred on economic resilience.

DEFINING ECONOMIC RESILIENCE

Resilience is an increasingly popular term that has been applied across many academic disciplines, although it is applied using a number of different definitions. Within the programme it is important to define the term for the purpose of supporting the building of resilient economies in the UK.

The literature also suggests that care needs to be taken when using the concept of resilience to make explicit any hidden assumptions or value judgements that underlie the application of resilience. Such hidden values are more likely with the simple 'rebounding to equilibrium' conceptions, as they fail to question the social and ecological qualities of the equilibrium state we are expected to rebound to.

The adaptive definition of resilience, therefore, better serves the purposes of an organisation seeking to support social justice. We recommend the following definition of economic resilience:

Economic resilience is the capacity of an economic system to adapt in response to both short-term shocks and long-term changes in ecological, social and economic conditions while supporting the community to thrive within fair ecological limits. It requires the ability to:

- absorb shocks and retain basic system functionality;
- self-organise (social institutions and networks);
- innovate and learn in response to disturbances.

MAPPING KEY ORGANISATIONS AND INTERVENTIONS

The mapping exercise identified five strategies to build economic resilience that could be applied across a variety of intervention points (see Figure 4, page 22). Our analysis identifies two complementary but distinct ways in which a financial system focused grant programme could seek to address building local economic resilience:

- First, by directly building the capacity of local financial institutions broadly defined to include new models such as peer-to-peer lending, local currencies and mutual exchange mechanisms, community share issues, as well as credit institutions such as CDFIs and credit unions.
- Second, by developing support for certain specific sectors that are considered key to building local economic resilience (and by implication, national economic resilience too). Obvious candidates are energy, food, land and housing, and potentially transport and social care. There is an emerging field of social entrepreneurship in these sectors, and all will require patient capital and building of skills and capacity around financial management, developing investible business models and corporate governance.

It would be necessary to scope this further by examining the 'funding chain' in each sector to identify specific blockages or barriers, as the financial dynamics and business models in each sector can differ markedly. The institutional arrangements, governance, and financing for Community Land Trusts, for example, are very different from local food co-operatives. This would ideally involve developing a theory of change for the intervention that would make explicit the logical links between an intervention and its likely impact on economic resilience.

POTENTIAL THEMES FOR PRIORITY INTERVENTION

To augment our own analysis, and to provide further detail on the two areas of support suggested above, we spoke on a confidential basis with a number of resilience experts engaged both in theory and practice to see if any themes emerged about where interventions would have most impact in supporting economic resilience. The identity of Friends Provident Foundation and the reason for the research were not disclosed. The themes that emerged were as follows:

Theme 1: Funding for early stage development to support innovation and pilot case studies

There will probably always be seen to be a shortage of capital for social enterprise and funding for social provision. However, several people emphasised that the emerging fields of community enterprises were facing particular challenges in this respect. The answer is not necessarily grant funding; there is also a need for patient capital, such as zero or low interest revolving loan funds, and for forms of risk capital, or quasi-equity.

"We have been repeatedly told that by far the greatest barrier to community-led regeneration activity is the lack of available finance to support the very early stage development of project ideas"

"to find a different quality of money – between gift and grants and debt finance. So a form of 'co-operative capital""

"at risk development grants, to be repaid only if the business gets going"

"there is nothing like actual examples that initiative-specific funding can create"

Theme 2: Co-ordinated advice, knowledge and support

We identified in the mapping exercise that support networks are an important part of fostering local innovation and spreading good practice and knowledge. There is scope for partnerships between place-based funders and other agencies, with national support organisations and funders that act at the national level.

Although there are already organisations that seek to support social enterprise (e.g. ClearlySO, UnLtd) these are generally not linking together the ecological with the social imperatives.

Furthermore, as in the case of tailored funding to specific sectors, there are support organisations that focus on sector-specific advice and support. However, despite the existence of some organisations in this space, there does still appear to be a gap in comprehensive co-ordination of support for organisations, individuals and communities who are working with the framework of resilience, and this would also be an area worthy of some further detailed scoping research.

"a central point, run by community enterprises, where would-be entrepreneurs could get a clear overall picture of what advice, funding, support, mentoring etc. is available to them"

"a funded peer-to-peer mentoring programme – e.g. a whole day seminar every month for all the communities asking for help/support in learning from what they've done"

"a budget for individual initiatives that would allow them to draw down a selection of training that they feel would be useful from a menu of training options"

Theme 3: Bringing different interventions together

One of the intervention points identified in the mapping exercise was the co-ordination of a number of different activities and strategies in the same locality, into a comprehensive approach to demonstrating how to build economic resilience. This is an area that we believe has little support, perhaps because it is not an easy thing to do.

Examples of partnerships between local governments, public agencies, NGOs and businesses are emerging that might offer lessons for how to create local 'resilience coalitions' that all work within a shared vision and conceptual framework to leverage each other's activities to maximise their impact in a locality. The Evergreen Co-operatives case study is relevant here, as is Lambeth Council's 'co-operative council' strategy,⁸ and Haringey's Carbon Commission.

"an integrated programme of community-led activity that addresses all the aspects of a new local economy"

"the whole pipeline of activity from identifying the enterprise opportunities, inspiring new entrepreneurs, supporting them as they develop and giving them access to the right investment"

"Local communities need a kind of 'bank manager' who can tell them about IPS, CSA, community investment schemes, local currencies, crowd funding, asset

transfers, meanwhile leases, social impact bonds, impact investors, lending circles, barter schemes, timebanks, ethical banks, credit unions, barter cards, reciprocal trading schemes, mutual credit network ... if every community had easy access to this information it would supercharge the transition."

CONCLUDING REMARKS

The concept of resilience offers a useful framework for addressing economic, social and environmental issues in a systemic way. It is compatible with the overall approach of Friends Provident Foundation in that:

- It is a framework that seeks to address the causes of problems by improving the qualities of the economic system.
- The **centrality of the financial system** to much economic activity makes this an effective intervention point to build resilience.
- Two of the most important qualities of resilient systems are diversity and adaptability, and this **encourages pioneering solutions** to the question of the 'right use of money'.

In addition to further research and discussion on the themes set out above, it would be useful to develop a theory of change in the context of this economic resilience framework to specifically explore the relationship between the macro and micro strands of the programme.

There is the potential for conflict between the macro and micro approaches, and it would be beneficial to test the consistency of assumptions, approaches and conclusions. For example the macro strand (City/industry) includes activity that will engage large corporate bodies in the process of building more resilient economies in the UK. While large corporates and other organisations can arguably be effective agents of change to deliver impact, for example on carbon emissions at scale, their potential to contribute to local economic resilience is more complex. Engagement with City and national/global businesses would need to take account of the negative impact that large corporates can have on local economic resilience by increasing the outflow of money, reducing diversity of enterprises and concentrating ownership and governance away from local communities. nef's work has consistently shown that local economic development driven by communities, particularly in disadvantaged areas, requires the retention of wealth in the local economy to reinvest back into the area.

Another potential conflict is between resilience and economic growth; interventions that can increase gross domestic product (GDP) can and often do conflict with other objectives, such as reducing inequalities and building social and ecological resilience. There needs to be a careful distinction between means and ends. If the goal is economic resilience, then GDP growth might be the means to that end, but never the end in itself.

Notes

- 1 For example, Dynamic Stochastic General Equilibrium (DGSE) models attempt to forecast changes in macroeconomic variables based on principles of how individual agents such as households and firms interrelate with one another. The impact of external shocks to the system, such as technological change or fluctuations in energy prices, can be examined under the assumption that the system will tend back towards equilibrium.
- 2 REalliance refers to the term 'social-ecological resilience' (www.realliance.org.uk).
- 3 Transition Network is an international network of over 1,000 community-led initiatives to respond to the challenges of climate change, resource constraints and economic insecurity (www.transitionnetwork.org).
- 4 This is depicted graphically in the literature review that accompanies this report.
- 5 Adapted from Lewis and Conaty's (2013) seven principles of resilience in discussing a transition to a steady state.
- 6 Adapted from the sustainable enterprising communities framework developed by nef as part of an action research programme working with 13 communities in the East Midlands from 2003–07. See also www.pluggingtheleaks.org.uk.
- 7 Big Society Capital recently released an outcomes matrix developed to signal the types of change they are seeking to support, which, importantly for economic resilience, includes well-being, learning, employment, assets and influence and participation (www.bigsocietycapital.com/outcomes-matrix).
- 8 Lambeth released a White Paper outlining their Co-operative Council Strategy in 2010 (www.lambeth.gov.uk/NR/rdonlyres/CA6C2E2F-33E4-48CE-82C1-D7E0E82EEF9E/0/CooperativeCouncilWhitePaper.pdf).

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