Economic Shocks Research

A report to the Department for Business, Innovation and Skills

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Executive Summary

1. SQW Ltd (SQW) and Coventry University Business School were commissioned by the Department for Business, Innovation and Skills (BIS) to undertake research into economic shocks and to produce a framework to inform decision-making on whether government should intervene in the event of a shock, and the options for the appropriate form of intervention.

Background

- 2. The study defined economic shocks as instances of significant job losses, encompassing the closure or rationalisation of large commercial undertakings due to market forces and/or strategic decision-taking, or shocks resulting from external factors such as natural disasters and other events (such as fires, social unrest and strikes).
- 3. The framework has been informed by good practice and lessons from previous shocks, both in the UK and internationally, drawing on consultations and a review of existing literature. As the study was undertaken in a short timescale, from mid-January to the end of March 2013, the literature review and consultation process was pragmatically defined. A systematic review of the literature was not possible in the timescale or resource of the study, and the consultations were limited to just under 30 individuals with a range of perspectives.
- 4. The evidence highlights that each shock needs to be taken on its own terms: the combination of issues in play, the potential effects of shocks, and the context within which they occur vary. Therefore, the framework has been developed with this in mind as such it is seen as a "decision-taking" framework, in that partners will need to play an active role in the process; the framework is not designed to be a mechanistic approach to decision-making.

The process and causes of shocks

- 5. The literature identifies that there are different 'moments' in shocks, which can affect their process and development. These moments can include:
 - foreseeing shocks and seeking to influence the decision-making of businesses in order to prevent a shock
 - implementing mitigating actions to reduce the effect of a potential shock
 - actions during the process of a shock
 - responses in the aftermath, either in the short-term or long-term.
- 6. The process of shocks and the opportunities for action are dependent on when the shock is announced and known some can be slow-burn and foreseen, others can be overnight and sudden. Similarly, the period for impacts can span from immediate through to longer-term effects.
- 7. The immediate causes of business closures are due to business decision-making, but the wider context of causes needs to be understood in the light of sectoral, market and



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technological trends. These trends can include the changing nature and size of demand in markets, over-capacity in supply/provision, cheaper competition from international producers, and altering business models including with respect to the processes of innovation. The macroeconomic environment can have a particular bearing on some of these causes. For example, economic downturns can have a noticeable effect on demand, as can exchange rate shifts, which can affect the competitiveness of goods and services. Some of the causes can be tracked and understood over time, which can contribute to foresight of shocks (or potential shocks).

8. Disasters and events, on the other hand, normally occur out of the blue, for example flooding, social unrest and other disasters. Whilst they are wholly unexpected in terms of when and where they might occur, contingency planning might be possible, e.g. under the guise of climate change adaptation (in relation to flooding).

The potential effects of shocks and the rationales for intervening

- 9. A framework and key set of issues can be established to guide assessment of the potential effects, though it is important to take each shock in its own context. The study identified four key domains, which are important in implementing the framework: the **direct business(es)** involved; the **supply chains** of the business(es) affected; **workforce and skills**, notably those workers within businesses and supply chain companies; and **place and communities**, covering specific land and property issues, communities and wider place competitiveness.
- 10. Assessing the overall effect of a shock needs to take into consideration that *something will happen anyway*. Workers may well find alternative destinations before closure, and positive effects may emerge, such as new business creation. Moreover, the assessment and diagnosis of a shock is critical in understanding whether there is a case for government intervention.
- 11. Understanding the rationale for intervening at the level of a business that is closing/may close is challenging for policy-makers, because of the political pressures that may affect any rational decision-taking. Issues of national security (e.g. to energy supply, health care resources and financial stability) are seen as cases when government should step in, but deciding whether to intervene to prevent, say, a manufacturing business from locating a plant elsewhere or closing a plant in the UK rather than one overseas is less straightforward. Three fundamental issues have been identified as being important in taking such a decision: the importance of the business, its supply chains and its skills/technologies in relation to national industrial policy; whether the shock has been foreseen with sufficient time until impending closure; and whether the decision can be influenced in a sustainable way (i.e. can the business be persuaded to stay, and will this mean it will stay for the long-term).
- 12. If there is not a case for intervening at the level of the direct business(es) involved, there may be rationales for responding to other elements, for instance supporting workers to find alternative positive destinations, providing assistance to supply chain businesses to diversify and to access new markets, and addressing issues relating to sites, wider 'sense of place' issues and the communities affected.
- 13. The evidence on assessment and diagnosis is critical in framing any case for support: in the example of the characteristics of the workforce affected it is quite hard to present a case for



- significant government support for flexible, mobile and highly-skilled workers; but a case could be made for workers facing multiple barriers.
- 14. A final key factor in understanding the effects of shocks is the important interplay between the business, supply chains, labour markets and place. In the examples of more substantive shocks that affect all domains, there is likely to be a strong case for intervention, and an holistic approach to the response may be appropriate, which begins to take us into the area of longer-term economic development and local/regional restructuring/resilience. The case study material highlights that this can be challenging to deliver, especially in tough economic contexts.

Learning from past responses

- 15. Drawing on the case material, there are a number of lessons for determining and delivering appropriate responses. These include the following:
 - Appropriate mix of interventions: More effective and rounded responses seek to address all of the issues, even if this is over the longer-term in instances where wider restructuring and/or resilience needs to be an objective (e.g. responding to shipyard closures in Gothenburg).
 - The importance of good intelligence: Data that can be used intelligently can inform effective diagnosis of the issues, and the targeting of support. This can be as detailed as being able to identify the individual suppliers within supply chains. A key building block of good intelligence may be a history of engagement with the business(es) concerned. This can help to foresee shocks, and bring about mitigating actions (e.g. Birmingham City Council's history of engagement with LDV, which resulted in actions around training and supply chains in advance of eventual closure) or even prevent shocks from occurring. Engagement with strategically important businesses nationally or locally is likely to be a critical element to foresight, as was the case in preventing the closure of General Motors' plant at Ellesmere Port and Jaguar Land Rover's Castle Bromwich plant.
 - Significance and influence-ability of the issues: The significance of the scale of a shock, and the ability to influence the issues are important drivers of whether a response is viable and likely to have the desired effect. These two issues are often not natural bedfellows, especially in the context of economic restructuring. For example, the scale of effect resulting from the closure of Vickers Shipbuilding and Engineering Limited in Barrow-in-Furness was significant, but the context of a peripheral location with an undiversified economy and a low skills base was not conducive to economic restructuring. In other cases, forewarning has provided a degree of influence, and in post-shock situations having some opportunities and/or assets on which to build has proved to be useful.
 - Structures, processes and people: There needs to be an appropriate model in place to lead the response with clear responsibilities, lines of reporting and governance, and this ought to be appropriately led in spatial terms (e.g. local shocks led locally). Strong leadership and proactive individuals can mean that things happen quickly (as was the case with MG Rover).



- Resource and capacity: in previous cases, such as the response to MG Rover, discretionary resource could be leveraged quickly. This meant that actions could be set up that were bespoke to particular issues. In the current context, with less discretionary resource, it is important to use national models such as the Rapid Response Service, and to draw on existing programmes, such as support through the National Apprenticeship Service, UKTI (UK Trade & Investment), Manufacturing Advisory Service, R&D grants and opportunities through schemes like the Regional Growth Fund.
- 16. The issues set out are predominantly process-based. The main report also includes specific examples of what actions have worked well (and less well) from past responses, drawing on business, supply chains, people and place responses.

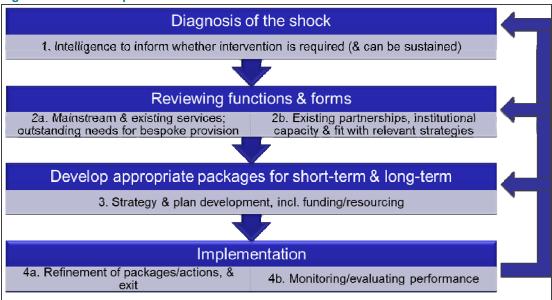
A practical framework

- 17. Drawing on the case study material, and the key determinants of shock responses that have been identified, we have developed a simple four-stage framework process, which ought to be an iterative process. This is set out in Figure 1, with the following stages:
 - 1. Diagnosis of the shock: gathering intelligence by drawing on existing and new data relating to the shock, to inform thinking on whether interventions are needed at the level of the direct business(es), supply chains, the workforce, and place and communities including the market and other failure arguments that underpin this.
 - 2. Reviewing appropriate response functions and forms:
 - 2a. Functions: consider (i) signposting to appropriate mainstream services in order to address relevant needs identified under Stage 1, (ii) whether other existing initiatives could be leveraged, and then (iii) whether there are still unmet needs that could be addressed through bespoke provision. The framework draws on the evidence base to ensure that this stage assesses the possible risks, costs and benefits of actions.
 - > 2b. Forms: consider existing partnership arrangements and joint agency-working, the spatial level of the issues, the nature of issues in play, and whether there is an existing strategic framework within which the response might sit.
 - 3. Development of appropriate packages for the short-term and long-term: based on the previous stages, planning (and, if appropriate, strategy development) is undertaken.
 - 4. Implementation of actions there are two further considerations here running alongside implementation:
 - ➤ 4a. refinement of packages/actions and knowing when to exit formally from public sector response.



▶ 4b. on-going monitoring and evaluation of performance – the framework contains some thoughts on how BIS (and partners) might think about more robust assessments of the counterfactual.

Figure 1: Framework process



Source: SQW and Coventry University Business School, drawing on Pike (2005) and Chapain et al (2011)

Going forward

- 18. The framework provides an evidence-informed structure for BIS and partners in taking decisions on how best to respond to shocks, including the structures and governance arrangements that may be most suitable. Each shock is different, given the combination of causes, issues, institutions and possible effects. As a result, the framework should be seen as a guide towards critical thinking and decision-taking around these issues. The framework draws on the evidence and different scenarios to illustrate and inform this thinking and decision-taking process.
- 19. Having sound intelligence on shocks has been found to be a key determinant of effective response. Whilst there is limited capacity for BIS and local partners to be able to foresee shocks, this type of intelligent foresight is a useful aspiration to have. Using networks through BIS Local, BIS sectoral teams, sector organisations and Local Authorities can be a useful 'eyes and ears' role that can foresee shocks. Once closures have been announced, or events have occurred, a critical first step is to gather appropriate data to diagnose and understand the shock, and contribute to effective actions in response. It is important to note that there is variation in the capacity of Local Enterprise Partnerships (LEPs) to provide an intelligence function, and to consider the width across the domains and issues that affect the long-term response to shocks. The LEP capacity fund may help, but addressing such issues is important for future shock responses, and for local growth more generally.
- 20. The engagement of the private sector in responding to shocks is an interesting device that BIS and partners may wish to consider going forward, leveraging issues around brand preservation and corporate citizenship. There are examples to draw on, with Pfizer, AstraZeneca and Tata all recently taking active roles in response to closures. In addition, Rio



Tinto Alcan's closure in Northumberland provides an example of an approach actually instigated by the employer, which also included capacity to support the response, and legacy funding to get actions off the ground.



Introduction

1.1 SQW Ltd (SQW) and Coventry University Business School were commissioned by the Department for Business, Innovation and Skills (BIS) to undertake research into economic shocks and to produce a framework to inform decision-making on whether government should intervene in the event of a shock, and the options for the appropriate form of any such intervention. This final report sets out the findings of the research and presents a framework to be used in the event of shocks.

Background to the study

Context to the study

- 1.2 Shocks are a frequent and regular part of the economic development and growth process. Whilst their immediate effects can be painful for the places and people implicated, for the longer term this 'churn of businesses' can provide the stimulus for enterprises to redirect, innovate, and become more competitive, resulting in less competitive incumbents withdrawing from the market. As recognised in the original Invitation to Tender (ITT), government *cannot* intervene in all economic shocks though it is noted that 'mainstream' interventions are provided through, for example, Jobcentre Plus and regulations around redundancy processes. Given the context of shocks as contributing to healthy 'churn' in the economy, government *should not* necessarily intervene in all shocks.
- 1.3 By considering rationales for intervention, in terms of market failures (e.g. imperfect information and negative externalities) and distributional arguments, the intent of the study was to help to inform decisions on whether government should intervene in the event of shocks in the future. This recognises that there are costs to economic shocks. So, in the short-term, factors of production are under-utilised, for example due to unemployment of labour because of job losses. In the longer-term, it can take literally generations for local economies to adjust, and incomplete adjustment can result in on-going under-utilisation of potentially productive labour and capital, and raised costs on the welfare and benefits fronts.
- In an increasingly post-industrial economy such as the UK, there are a number of examples of economic shocks over history, ranging from closures of the textiles and the mining sectors, call centre operations moving overseas, manufacturing closures (e.g. in the automotive sector, and the rationalisation of steel plants) through to more recent closures of R&D facilities. Shocks are, therefore, not a new phenomenon, and it is important to recognise from the outset that much has already been experienced, learned and understood. In the past two decades, regional Government Offices and Regional Development Agencies (RDAs) had capacity and capability to design and implement speedy and flexible responses to economic shocks, working closely with Whitehall. With their abolition, much of the capacity, capability and institutional memory and learning have been lost.
- 1.5 There is a need for BIS (and in particular BIS Local) to provide critical support to local areas in the response to shocks, working with Local Authorities and Local Enterprise Partnerships (LEPs). LEPs have less capacity than RDAs had, and there is also variation across the 39 LEPs in this respect, despite the increase in their capacity and decision-taking powers which



were announced by the Chancellor in his the Autumn Statement of 2012. This followed Lord Heseltine's (2012) review calling for more powers for LEPs. This indicated that LEPs "must be enabled to respond to economic shocks or opportunities in their areas" (Heseltine, 2012, p44), and the 2012 Autumn Statement tasked LEPs with setting strategic plans for local growth, and enhanced their role in setting skills strategies. Most recently, many of the recommendations in Heseltine (2012) have been accepted by Government, though it is too early to comment on the practical differences that this will make on-the-ground.

- 1.6 Given that shocks are not a new phenomenon, there is a significant amount of knowledge, either in papers and reports, or within individuals with experience of responding to shocks. Indeed, as one senior consultee to this study put it, there is a "rich institutional memory to access". Therefore, in understanding the evidence on responding to shocks, the imperative is to collate the institutional and individual experiences of shocks, and avoid the easy trap of thinking that the issues are 'new' and a somehow unique feature of this particular economic cycle.
- 1.7 Against this background, this study was to help BIS to develop a robust framework, and so an evidence-based and 'permanent process', which can be called upon at any time in the event of economic shocks. In doing so, the framework was to be designed to ensure that responses to unpredictable events dovetail with local priorities for longer-term growth.

Broadly defining shocks

1.8 The ITT for the study defined economic shocks as instances of significant job losses, which can encompass the closure or rationalisation of large commercial undertakings mainly because of market forces and/or strategic decision-taking, or in some cases due to external factors such as natural disasters. The brief highlighted that these external factors can also encompass other events, such as social unrest or man-made disasters. This study has used, therefore, these parameters in defining shocks, and whilst business closures due to market forces and/or strategic decision-taking have dominated the case material, breadth of type has been ensured, for example by considering the responses to floods and social unrest. Macro-economic management of shocks, such as exchange rate shifts and utilities' prices, was out of scope, though they were identified as part of the causes of shocks through business closures and relocations, and sectoral decline.

Aims and objectives of the study

- 1.9 Against this background, the overarching aim of this study was to develop a practical framework that can be used by government in making the decision as to whether to intervene, and what the most appropriate nature and scale of intervention ought to be. This was to be informed by reviewing existing literature, good practice, and lessons from previous shocks, both in the UK and internationally. In reporting on the evidence base and developing the framework, the specific objectives were to:
 - deliver a defined set of criteria to guide policy-makers in answering the question of whether to intervene



- allow policy-makers to understand what the range of possible policy intervention options looks like and the circumstances under which any particular option should be pursued
- allow policy-makers to explore the type of intervention and the practical considerations for implementation
- develop a monitoring and evaluation approach that can be applied to future economic shocks
- gather evidence to support and encourage better cross-border collaboration with Devolved Administrations to ensure robust and efficient/streamlined processes for managing UK wide shocks are in place.
- 1.10 The focus of the study was on the first three objectives. The approach to monitoring and evaluation (for the fourth objective) was to be set at a high level, identifying key datasets that would be relevant drawing on the evidence used to diagnose a particular shock. Most shocks falling within the scope of the study are likely to affect economies locally and regionally. Therefore, in relation to the last objective, the intention was to explore learning from the Devolved Administrations and identify how collaboration in the event of a cross-border shock might best be progressed.

Approach

Methods

- 1.11 There were three key tasks as part of the study:
 - A literature review was undertaken, with 31 pieces reviewed in detail to a set template, with a wider range of other references also incorporated. The 31 pieces were a mixture of academic articles and grey literature (e.g. commissioned evaluations and other reports). They were selected through a focussed literature search, which identified a long list of 127 relevant pieces¹. A sift was undertaken based on titles and abstracts to identify a final list. This final list was structured deliberately to capture three types of literature: general texts on economic shocks and restructuring literature; articles and reports covering UK case examples; and articles and reports covering international practice, including comparative pieces between international and UK cases.
 - Consultations were undertaken with 27 individuals, with experience over time, varying levels of direct involvement, and with a mixed complexity of shocks. These were undertaken using a topic guide of key issues, though reflected individual experiences and perspectives relating to economic shocks. Those consulted came from a variety of organisations, including central government and national agencies (e.g. BIS, Skills Funding Agency, Jobcentre Plus), local authorities and LEPs, regional/local Jobcentre Plus and Skills Funding Agency representatives, sector representatives (e.g. the Manufacturing Advisory Service), other members of

 $^{^{\}rm 1}$ Annex A provides a bibliography and Annex B sets out the literature search process in more detail.



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previous Task Forces set up in response to shocks and the Devolved Administrations².

- An iterative process was undertaken with BIS on framework development. An initial
 set of principles for developing the decision-informing framework was discussed
 with BIS at the outset of the study. This was followed by a workshop with BIS
 informed by the key findings from the literature review and consultation process,
 before a finalised framework was produced.
- 1.12 It is important to note that the study was undertaken over a short period, starting in mid-January 2013, with a revised report provided for the end of March 2013. Given this, there has been a limit on the literature reviewed and the number of individuals consulted. The study team has not had the time, or the resource, to undertake a systematic review of literature. Therefore, the material presented in the research sets out the evidence drawn from a finite number of cases of shocks, rather than from a comprehensive trawl of evidence.

Key issues explored

- 1.13 The tasks undertaken were informed by the background to the study, set out earlier in this introductory chapter. In addition, three key economic development domains were used to structure the initial examination of different types of shocks: business, people and place. The following points illustrate some of the critical issues in considering these domains:
 - Business-related factors: the underlying trends affecting the business(es) involved, and the causes of the shock, e.g. markets, competition, technology, and costs.
 - As part of business-related factors, the effects on **supply chains** were considered.
 - People-related factors: the scale of the effect on employment, and the nature of those affected, for example covering skills levels, demographics, mobility, and longterm employment fates.
 - Place-related factors: the overall effect on the local/regional economy, and specific
 effects, e.g. through sites, premises, communities and sense of place.
- 1.14 Based on the evidence from different case studies, these domains are revisited at the end of chapter 5, and this informs the framework structure presented subsequently in chapter 7. As part of the exploration of these domains, the research considered different sets of shock scenarios, and the arguments for government intervention within them. The scenarios were:
 - Shocks in dynamic/growing local economy versus shocks in static/declining local ones
 - Whether the labour affected is flexible (e.g. mobile, and with transferable/indemand skills) as opposed to inflexible (e.g. less mobile, and with specific, harder-to-transfer skills)

 $^{^{\}rm 2}$ A list of consultees is provided in Annex C.



- Shocks resulting from 'slow-burn run downs' (i.e. closure/rationalisation is well signposted/forewarned) compared with 'overnight' shut-downs.
- 1.15 In the framework presented in chapter 7, these initial three scenarios have been developed into a wider and slightly modified set of five scenarios, so as to present illustrative decision-taking in the event of shocks.
- 1.16 In addition to the last of the scenarios above, the time dimension was an important consideration in another way. In understanding the responses and potential responses to shocks, the research considered the different natures of intervention to specific shocks intended for the short-term and longer-term, and how, over time, the more general nature of shock responses in the round has altered and changed as different parts of the economic cycle are experienced.

Application and audiences

- 1.17 In developing the framework, we have used the language of the framework informing "decision-taking", rather than "decision-making". This nuance is important: the framework should not be seen as a mechanical process that provides people with a computed answer on whether to respond and what the response looks like. "Decision-taking" means that partners have to play an active part in the process, thinking through the specific issues of the shock and how it affects businesses, people and places. The framework is to be used to inform the process, and as such which will inevitably require active thinking and judgement on the part of users.
- 1.18 The framework presented in chapter 7 also draws the distinction between response functions (*what* the responses are, in terms of the rationales and the specific actions to be implemented in light of these rationales) and the response forms (*how* the responses are to be implemented, i.e. the structures and processes of the response). Ensuring what is intended in principle, and how this is best achieved in operation, is a key separation to bear in mind.
- 1.19 It is anticipated that the framework will be used by BIS in conjunction with its partners, be they within other government departments in England, Scotland, Wales or Northern Ireland, national agencies, or sub-national partners such as Local Authorities and Local Enterprise Partnerships.

Report structure

- 1.20 The rest of this report is structured as follows:
 - chapter 2 sets out different types of shock and the varying causes of these
 - chapter 3 identifies the effects and potential effects of shocks, and how these can inform the rationales (in terms of market and other failures) for government intervention
 - chapter 4 sets out previous work undertaken in developing a theoretical and/or practical framework for understanding and responding to shocks



- chapter 5 provides examples of previous shocks, covering different types of shock from a range of time periods, institutional contexts and sectors
- chapter 6 synthesises the lessons on responding to shocks, including the evidence on what has worked in the past
- chapter 7 introduces and presents the framework and its components.
- 1.21 A series of annexes cover literature references, consultees engaged, detail on the literature search, and evidence on the effectiveness of different types of interventions in different contexts.



Types of shock

2.1 This chapter sets out the different types of shock, drawing on experiences of the causes and nature of shocks over the last 20 years or so. The purpose of doing this is to provide further detail on why shocks occur, and the implications for decision-taking of such diagnoses.

Causes of shocks

2.2 This sub-section looks at the causes of shocks, considering three types: those relating to business closures/rationalisations, regional shocks (which are closely related to the first type), and shocks caused by disasters and other events.

Shocks stemming from business closures/rationalisations

- 2.3 Pike (2005) provides a useful summary of the range of factors and the causation of closures, pointing often to the combinations of relations. He distinguishes between the **origins of shocks** due to technological obsolescence, under-investment, weak productivity, market share loss and declining profitability, and the **factors affecting decisions** such as intracorporate investment competition, increased costs, loan foreclosure, recession, relocation decisions and demand shifts. Similarly, the European Commission (2010) describes restructuring as a "process linked to change" as "markets, technologies, and productivity develop continuously" (p12). Interestingly, the paper describes the process as essentially being company-driven, and it concludes that restructuring is not triggered by markets or technologies, but by "managerial decisions that depend on strategies, information, skills, abilities and the possibilities to understanding different situations and anticipate their development" (p12).
- 2.4 This distinction is quite helpful in one sense, because it emphasises to policy-makers, who may wish to influence the decisions around shocks, that they are often dealing with managerial and corporate decisions. This is particularly illustrated in the decision-making of automotive manufacturers when considering plant locations, relocations and investments (see Table 0-1 below, drawing on the House of Commons Trade and Industry Select Committee, 2007). A further strand is that decision-making may actually stem from government decisions, e.g. to close defence sites (Schliemann, 2012, refers to the closure of military bases in New England, USA) or reduce budget areas that can have significant effects on particular sectors and firms (e.g. defence budget cuts and the effect on BAE Systems, resulting in the closure of its Brough site in Yorkshire, or the effect on Rolls-Royce's military operations at Ansty, near Coventry).

Table 0-1: Factors affecting automotive manufacturers' decisions when considering plant locations, relocations and investments

Factor	Commentary
Flexibility	This encompasses such matters as the age of the plant and the scope for rebuilding/extending it; and whether the production lines are adapted to a 'platform' or 'modular' approach. Age may not matter if plants can be modernised and/or run more flexibility (e.g. BMW at Cowley, and Jaguar Land Rover at Halewood).



Factor	Commentary
Relationship of the plant with others, e.g. is it just an assembly plant or does it produce components, is it part of locally-embedded supply chains	For example, Japanese manufacturers have often put time into developing supply chains, and so are more 'embedded' within a particular place. Some plants can be more vulnerable because they are simply assembly plants – with many components acquired - such as Peugeot at Coventry (closed in 2007) or General Motors (GM) at Ellesmere Port.
Cost, in particular for labour and energy	Central and Eastern European countries can have labour that is one-third the cost of UK labour. Noted that Korean manufacturers are setting up in Central and Eastern Europe, mainly due to cost. It is also noted that it is quicker and cheaper to close plants and production lines or to remove shifts in the UK compared to other countries such as Germany, France, and Italy (GM at Luton is a recent example).
Productivity rates and skills	Productivity of plants is a key factor, and this is often due to skills levels, but also other factors such as management and operations, and above all how many cars are rolling off the production lines.
	The report makes a number of points relating to raising skills levels, providing careers advice etc. It is also instructive that of the 2,000 companies supplying the sector in the UK, half are SMEs (small and medium size enterprises), and many have not been able to raise skill levels or move to higher value products, thus struggling to compete with either lower cost imports or high-technology imports.
Home base	Whether a company considers the country to be its home base in the particular region (i.e. European region for UK-based plants).
Wider trends	E.g. overcapacity in the markets, or exchange rate stability.
	Source: House of Commons Trade and Industry Select Committee (2007)

Source: House of Commons Trade and Industry Select Committee (2007)

- 2.5 Whilst the European Commission (2010) and Bailey and de Ruyter (2012) highlight the direct decision-making of organisations, it is clear from the case material collated for the study that the causes of shocks do need fundamentally to consider the wider role of sectors, markets and technologies. The case study material has highlighted a number of different causes, summarised as follows:
 - over-capacity in market supply/provision, e.g. strategic defence, automotive manufacturing, oil refining, steel production, often further exposed by significant market downturns (e.g. the current European auto market downturn)
 - changed demand for goods and services (often combined with the previous point),
 e.g. the shift from coal to gas fired energy sources, or the changes being brought about by mass 'customisation'
 - cheaper competition from international producers, e.g. shipbuilding, ceramics, textiles, electronics etc.
 - technology led or enabled drives to cut costs and improve efficiencies, e.g. automotive manufacturing decisions on where to assemble new models (often combined with other market pressures, such as cheaper competition)
 - changing business models and approaches, such as to innovation, requiring rationalisation of operations, e.g. the 'outsourcing' of pharmaceutical R&D to SMEs, and the changing models facing manufacturing brought about by ICTs (information and communication technology) (including the development of the 'virtual factory', and the 'digital factory')



- over-ambitious growth, especially with respect to fixed assets, which needs to be reversed in economic recession/declining markets, e.g. retail sector
- changing consumer preferences, including in how goods and services are bought, e.g. the now-emerging online purchasing model and the consequences this is having for place-based business operations, such as retail
- (with hindsight) poor business decisions, often relating to markets and/or technologies, including unsuccessful takeovers or attempts to enter markets - any sector.
- 2.6 Macroeconomic factors feature in the literature as causes of shocks. For example, economic recession is a cause of some of those issues identified above, such as those relating to over-capacity and changed demand. Hill *et al.* (2011) referred to national downturns as a driver of the cyclical and sectoral shocks affecting cities in the United States; and the recent example of Northern Rock in the UK is a prominent example of an abrupt macroeconomic event resulting in a local economic shock. Macroeconomic factors resulted in a loss of confidence in Northern Rock as a business (Dawley *et al.*, 2012), bringing about the *"run on the Rock"*, and its eventual nationalisation and downsizing.
- 2.7 These issues suggest that the act of observing market, sectoral and technological trends can of itself offer insights in advance of shocks occurring. This was referred to as the "eyes and ears" of regional Government Offices in relation to businesses in their footprints. In the case of some sectors, this might be easier where good quality data exists, e.g. on investment, demand, sales etc., such as in the automotive sector. Nevertheless, it suggests that observing sectoral drivers in other sectors, such as pharmaceuticals currently, and other parts of manufacturing, might be informative in helping to understand where future shocks may come from particularly those that are relevant to the national industrial strategy, as set out by Cable (2012). An important aspect of foresight (both noun and verb) is also the direct relationships that public servants can have with major companies in priority sectors. For example, the Automotive Unit in BIS has relationships with key firms in its sector, and this was critical in getting forewarning of the potential closure of General Motors' factory at Ellesmere Port, which was then ultimately saved.

Lock-in and regional shocks

- 2.8 A different slant on causes of shocks is taken by the literature on path-dependency and lockin, which stresses the importance of history and institutional context for regional development. Hassink (2005) identifies three negative lock-ins that can affect industrial areas that are insular and inward-looking production clusters:
 - functional lock-ins, which are the inter-firm relationships
 - cognitive lock-ins, which relate to how a common world view is reached on trends
 - political lock-ins, which can seek to preserve industrial structures.
- 2.9 An example is provided by Grabher (1993), who explored political lock-ins in his studies on the Ruhr Area in Germany. These were described as "thick institutional tissues" that sought to maintain the existing industrial structures and therefore unnecessarily slowed down



industrial restructuring and indirectly hampered the development of indigenous potential and creativity. Hill *et al.* (2011) draw similar conclusions in their exploration of economic shocks affecting cities/regions in the United States. They find that when a region has been successful from a particular sector for a long time, agents in the region can be hesitant to react to shocks, feeling that recovery is certain to occur. In Detroit, the reliance on predominantly one industry (automotive manufacturing) brought about cyclical prosperity, and in hindsight it is considered that regional leaders should have sought to address such dependence. The authors note that planning for shocks is important, and that regions with multiple industries are likely to be more resilient.

2.10 The antithesis of lock-in, therefore, could be seen as the 'learning region' (Hassink, 2005) or the 'resilient region', which Wolfe (2010) described as having stronger "civic capital", a high degree of networking and interaction across the public and private sectors in support of regional economic growth, and institutional endowments that enable businesses to respond innovatively, e.g. to shocks.

Disasters and other events

- 2.11 The third group of shocks has been categorised under disasters and other events. Several have been identified through the literature review and consultation process:
 - Natural disasters, notably flooding, which might be expected to become ever more frequent with climate change. Therefore, effective responses to these events may be a key part of climate change adaptation.
 - In Grand Forks in the United States, there is a double-shock of a natural disaster (flooding) combined with an organisational closure/rationalisation due to the ongoing retrenchment of the military base (Hill *et al.*, 2011).
 - Disease (both human and animal), with Foot and Mouth Disease epidemic the most relevant recent example, affecting the agricultural sector and the rural economy more broadly (including through effects on tourism, and wider restrictions on the movement of goods and people).
 - Man-made disasters, such as the recent Buncefield Oil Depot incident (or more historically the Flixborough disaster), which was caused by an unconfined vapour cloud stemming from a mechanical fault.
 - Strikes, for example, the fuel strikes, which brought about a disruption-led economic shock across all parts of the economy.
 - Social unrest, such as the summer riots of 2011, affecting places such as London, Birmingham and Manchester, some 30 years on from similar events in Toxteth, Brixton and Tottenham. The promulgation of this type of shock may be changing, with the use of social media a key factor in spreading the issue in 2011.

Nature and timing of shocks

2.12 The nature of shocks, in particular the build-up, timing and aftermath can vary. Pike (2005) identifies a range of critical "moments" in the shock process, and a number of different



factors that can affect shocks. The literature on individual shocks that we have reviewed also highlights this variation in build-up, timing and aftermath.

- 2.13 The case of MG Rover is interesting, because it was a slow-burn event and a long time in coming. Following BMW's sale of Rover in 2000, and the formation of MG Rover, the Rover Task Force put in place a number of actions that ultimately limited the scale and scope of the eventual shock when MG Rover closed five years later. Similarly, van-maker LDV's troubles were well-known in advance of its closure in 2009. This meant that certain mitigating actions around the supply chain and the workforce could be implemented. It is, nevertheless, important to note that despite the signs of closure, when it is finally announced it still presents 'shock' to those involved, in particular the workforce.
- 2.14 In other cases, announcements of the closures of plants and facilities can be made well in advance of final closure. This provides time for a response, on the part of agencies, but also of those affected, such as businesses in the supply chain and workers. AstraZeneca announced the closure of its Charnwood site in March 2010, with the final closure anticipated by the end of 2011. This meant that many workers had the time to consider their futures, and SQW (2010) noted that many had decided what they were going to do next, whether transferring to other parts of the company, finding employment elsewhere in the sector, setting up a business themselves, making a career change (e.g. to teaching) or taking early retirement. Advanced notice also provides agencies such as Jobcentre Plus the opportunity to provide preparatory advice to workers before closure, and the Rapid Response Service, which provides services proactively on employer sites, can also be deployed. Advanced notice can place some strains on a business, however, because of the uncertainty it creates (the so-called 'Dead Men walking' effect), and the stresses it places on often long-standing employer-employee relationships.
- At the other end of the spectrum, there are closures that happen overnight or with very short notice. These are often only known when Administrators/Receivers are called in, with recent examples including the retail sector (e.g. Jessops) and the closure of Coryton Oil Refinery (Administrators were called in in early 2012, and in May 2012 it was announced that the refinery would close within three months). Of course, shocks caused by disasters and other events normally provide no notice whatsoever to those affected, though contingency planning may be an option for considering the potential effects.

Key points and implications for decision-taking

- 2.16 This chapter sets the scene for understanding shocks, by considering the causes of shocks and the immediate nature in terms of their timing. There are some implications that can be drawn in terms of a decision-taking framework:
 - Diagnosis of a shock should involve understanding the causes in terms of the broad sectoral, market and technological drivers affecting a business closure/ rationalisation. This can affect the appropriate responses, but also where future shocks may come from. Diagnosing causes of disasters can also be important as part of a learning exercise.



- Considering specifically the issues affecting managerial decision-making to close a
 plant or factory may be important if there is scope (and time) to influence and/or
 ameliorate the decision.
- It is a useful aspiration to want to foresee shocks, as this can assist in potentially preventing them, or in deploying appropriate mitigating actions that can reduce the ultimate impact of a shock. Having close relationships with key businesses can be a key part of this. In addition, having longer notice can assist in deploying responses early.
- There is a broader implication from the literature on lock-in, which relates to the importance of diverse and resilient regions and places, built on strong networks, civic capital, and openness to innovation and outside relationships. Such resilient places have been identified as being able to deal more easily with shocks.
- Time matters, in terms of how long a shock is in the making, how long the shock event actually persists for, and how long the post event impacts are felt by affected participants (be these people, their places, or indeed government at local and national levels).



Effects of shocks

3.1 In this chapter, the potential effects of shocks are set out, using the three domains of business, people and place, and drawing on examples. This evidence is then used to inform a discussion on the rationales for government intervention. From this, implications for decision-taking are set out as an important dimension of framework design.

Business

- 3.2 In the case of business closures/rationalisations, the effects on business can be separated into three broad areas:
 - There is the immediate business, which is closing or streamlining directly its operations.
 - There are supply chains, for which there are three sub-elements to note³:
 - Those businesses providing components or some other sector-relevant input to finished goods and services may be affected. These were significantly impacted by the closure of MG Rover in 2005, for example, and can be a key feature of other manufacturing shocks. The emphasis is on understanding the reliance of these companies on the primary business, and whether alternative markets can be found, as was reviewed by the Regeneris (2005) study. In other shocks, the effect may be more limited, because supply chains are not locally concentrated or because suppliers are quite specialist for example, following the closure of AstraZeneca at Charnwood it was commented that many of those providing goods/services relevant to AstraZeneca's finished products and services were highly specialist, and so would be retained if they offered something different to other suppliers (SQW, 2010).
 - A different aspect, however, of supply chains are those providing supporting services, such as catering, taxi services etc. which were identified as an adverse effect in the AstraZeneca case.
 - Third, the direct business affected by a shock may be an important supplier of a particular commodity, product or service to other organisations or customers. This may prompt intervention at the level of the direct business, given the potential importance in national strategic terms.
 - There is the wider business community, which may be affected by reduced spending locally due to the impact on the wages of local workers, or because workers leave an area. This is an important part of assessing the wider economic impact of a closure on a particular spatially-defined economy, and there is clear overlap here with place effects, covered below.

³ Given their potential significance and the separate consideration of intervention (as distinct from intervening directly with a business closing/ rationalising), supply chains may need to be considered separately from the direct 'business' as part of a decision-taking framework. We return to this in chapter 5.



- 3.3 In the case of disasters and other events, the same three categories may apply, but in different ways:
 - Those businesses directly affected may be much greater in number, and they will be affected through a range of different possible issues, such as whether they can access premises, whether they have appropriate insurance cover, whether they can meet customer obligations, whether they may need to relocate temporarily, and short term operational and cash flow considerations.
 - Supply chains may be relevant in these cases as well, in particular in terms of the effect on supporting services, as they may see a short-term fall in custom.
 - There is overlap between what might be considered as supply chains and the wider effect on the business community. For example, the Buncefield Oil Depot incident affected taxi businesses significantly, because of loss of custom relating to trips to/from the business park affected by the explosion. More broadly, there is an impact on wider businesses, again through reduced levels of spend, but also the potential for damage to profile, for instance natural disasters may put visitors off, which can affect tourism and recreation businesses.

People

- 3.4 The predominant people aspect is through the impacts on workers, and their wider communities (e.g. residents, families etc.) that can be affected through business closures and by disasters (this is addressed under the next sub-section).
- 3.5 There are three key dimensions to understanding the effect on the workforce:
 - The scale of the effect, i.e. how many workers might be affected either through the closure/rationalisation of the business or through supply chains, and how long the effect might last for (if it is a short-term closure): The scale of shocks seems to be decreasing over time, for example over 10,000 direct jobs were affected in more historic examples, and in some cases this represented a very significant proportion of the local workforce (e.g. up to one-third following the rundown of VSEL in Barrow-in-Furness). The closure of MG Rover in 2005 was also significant in scale with over 6,000 jobs affected directly and around 3,000 in supply chains, although the geographical concentration of effect was much less pronounced than in the case of VSEL. More recent shocks tend to be in the hundreds of direct jobs (e.g. Honda in Swindon, and Rio Tinto Alcan in Northumberland), though Tata's restructuring in Scunthorpe led to 1,200 job losses directly and about 300 in supply chains, and Pfizer's rationalisation at Sandwich resulted in 1,500 direct job losses (once the 650 retained on site and the 250 moving elsewhere in Pfizer are taken into account).
 - The spatial distribution of jobs, i.e. whether they are concentrated in a particular geography or spread out: In the case of national retail closures, for example, aside from headquarter operations, most of the jobs are highly dispersed across the country. In other closures, such as those cited above, the workplace concentration is obviously high, and the residence-based concentration is also relatively high.



- The characteristics of the workers affected: This includes: their skills levels; whether they have accredited qualifications for these skills; the transferability of the skills to other sectors and/or employers, and within this the specificity/generic nature of skills; the age of workers; the duration and culture of employment (i.e. have employees always 'been with the firm'); and geographic mobility (i.e. might they be willing to move in order to find alternative employment, or travel significant distances).
- 3.6 The characteristics are critical in understanding the likely effects in terms of longer-term unemployment. Physical connectivity permitting, those with transferable skills are more likely to be able to find alternative sources of employment, and those with higher mobility will be seeking employment in a wider labour market. Therefore, whilst job losses at Pfizer (at Sandwich) and AstraZeneca (at Charnwood) were reasonably significant in scale in comparison to other shocks in the current context, many of the workers had high levels of skills and qualifications that could facilitate finding employment, and they were also likely to be more geographically mobile. Those workers affected in sectors such as retail and financial services also tend to have more transferable skills than those in specific types of employment such as specialist, heavy and marine engineering. Attempts to support these workers may simply result in deadweight, i.e. because workers are likely to find alternative destinations in any case. This was a feature noted by support provided to those made redundant following Northern Rock's nationalisation (and its subsequent restructuring and sale) (Dawley *et al.*, 2012).
- 3.7 Drawing on these recent cases, it is clear that an assessment of the (potential) impact of a shock needs to take account of the dynamic nature of business and individual responses, and the fact that workers will find positive destinations before business closure.

Place

- 3.8 There are different components of the effects on place. At the headline level, it is possible to estimate the economic impact of a closure in terms of approximate GVA, (gross value added) e.g. due to lost economic activity directly, indirectly through supply chains, and induced through re-spending in the local economy. Studies are often commissioned to make such assessments, and there is extensive guidance elsewhere on such techniques. Drawing on cases examined in this study, a similar point is relevant here as it was under 'People'. Some workers may find alternative positive destinations locally quite quickly, which would reduce the overall economic impact; and indeed the closure of one business may yield positive results through the creation of others, e.g. by former workers. It is also important to draw the distinction between a workforce that may leave an area and one that will largely stay for example, a geographically mobile workforce may limit people effects (as outline above), but may exacerbate the impact on a place due to out-migration. These issues ought to be considered when understanding the overall impact of a shock.
- 3.9 There are other dimensions to the place effects:
 - The departure or rationalisation of a significant employer can alter the balance of employment sectorally and between public and private sectors. It can place some economies under greater reliance on the public sector for employment (a risk



identified by the Sandwich Economic Development Task Force, 2011, in relation to Pfizer's rationalisation in East Kent, or in the case of South West Birmingham following the collapse of MG Rover).

- Related to the previous point, major employers may be totemic parts of the economic profile and competitiveness of locations, with confidence and perceptions taking a hit when shocks are announced.
- There may be sites/premises that immediately become unused, and so in one sense there is an immediate concern in bringing these back into positive use, though this can also create new opportunities (e.g. high quality office and lab space following departure and rationalisations of AstraZeneca and Pfizer). If the sites are contaminated, or otherwise unsuitable for immediate use due to the previous use, then these present different challenges (for example significant derelict area following the closure of shipyards in Gothenburg in the 1970s, Cadell, 2008). Again, poor visual environments can impact adversely on 'senses of place'.
- Related to sites, there may be infrastructure issues to address, such as improving access or dealing with other issues such as flood defences. In disaster recovery, infrastructure issues can be an immediate area for action.
- There may be wider effects on communities, in particular as large employers withdraw from areas where there is a concentration of their workers (e.g. as in the case of MG Rover). There may also be more subtle effects, for example AstraZeneca contributed to local education through schools and events to promote science before its departure from Charnwood. The effect on communities is an important aspect of disaster-related shocks, due to the potential impact on homes.

Interplays between domains, and the rationales for intervention

Interplays

3.10 The interplays between the three domains are set out in Figure 3-1, which is derived from a conceptual framework used to understand local economic growth. This shows how the business, people, and place domains are interconnected, for example how the three domains inter-link in terms of job linkages. This graphic shows that, whilst individual issues can be categorised within each of the three domains, a broader understanding of shocks needs to consider the links between the domains in the wider economic development context. Indeed, it is likely that shocks that affect all three domains to a reasonably significant degree will require a more holistic response to deal with issues over a longer period. Moreover, as responses to larger shocks consider the future of a particular local economy, this starts to shift the emphasis towards economic restructuring requirements and concepts such as resilient regions, as discussed by Wolfe (2010). The focus for this study, and the resulting framework, has been on the short-term and long-term responses to particular shocks. Therefore, whilst the evidence (and resulting framework) incorporates some of the issues around wider restructuring, this has been restricted to initial actions (e.g. strategy development) and actions directly relating to the shock (e.g. diversifying supply chains or upgrading assets).



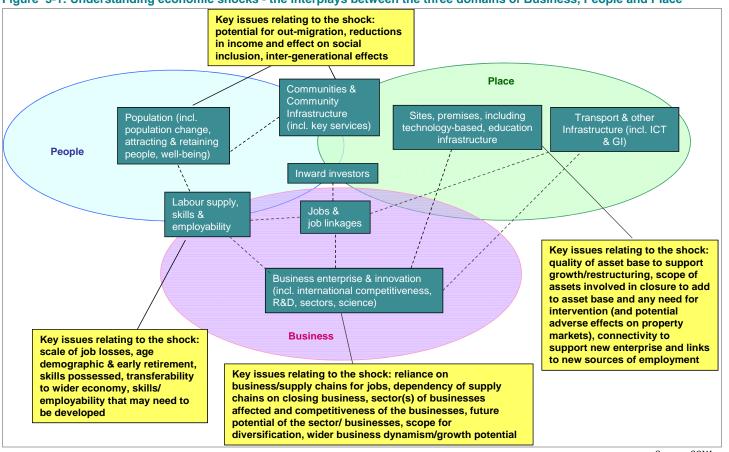


Figure 3-1: Understanding economic shocks - the interplays between the three domains of Business, People and Place

Source: SQW

Rationales

- 3.11 We now turn to the potential rationales for intervention. The original specification for the study noted that government cannot, and should not, intervene in the case of all shocks. Indeed, it can be argued that government already provides an intervention in the event of shocks, for example through mainstream support offered by the likes of Jobcentre Plus. Here we look at rationales for intervention, taking account of existing mainstream support. Three types of rationale are considered, as per HM Treasury Green Book:
 - Efficiency arguments, which are often termed as economic market failures, where the operation of the market does not result in an economically efficient outcome. These normally include information gaps and/or asymmetries, externalities, public goods and market power (e.g. barriers to entry or barriers to exit/lock-in).
 - Equity arguments, which refer to people and/or places being disadvantaged by who they happen to be or where they happen to be located. These are sometimes referred to as a 'failure of outcome' a desired outcome is not produced.
 - Organisational arguments, which include institutional failures (e.g. public sector interventions create perverse incentives or provide their own barriers) and coordination failures (e.g. public sector and/or private sector organisations require active support to link, talk to each other or coordinate).

Business

- 3.12 Shocks are a frequent and regular part of the economic development and growth process. The 'churn' of businesses' can provide the stimulus for enterprises to redirect, innovate, and become more competitive and so expand, resulting in less competitive incumbents withdrawing from the market. Seventy years ago, Schumpeter (1942) described the process of "creative destruction", using the examples of the shift from craft shop to factory and US steel to "illustrate the [...] process of industrial mutation [...] that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one" (Schumpeter, 1942, pp82-83). This argument has been set out in the case of more recent shocks with market forces perceived to help to bring about improved competitiveness (e.g. see Greco, 2004, in relation to closure in Teesside).
- 3.13 This economic argument provides a case for not intervening at the level of the direct business. This was generally echoed in consultations, i.e. that government does not intervene, unless of national significance. However, deciding what is significant is not straightforward, and it was noted that there often is significant political pressure to 'do something'. Specifically, two broad cases for intervening directly were most commonly-cited:
 - There was acceptance that there may be issues of national security, i.e. some institutions are so fundamental to keeping the country moving that there ought to be intervention, e.g. the reliable/dependable supply of petrol/diesel, wider energy security, resources needed for health care, and functional major financial institutions (i.e. saving the banks).



- It was noted that closures that fall within significant national sectoral priorities could have a strong case for intervention at the level of the direct business and its supply base, and this could include skills- and technology-related reasons. No hard and fast rules were provided here, and it was acknowledged that shocks/potential shocks have to be treated on a "case-by-case basis". Nevertheless, the priority sectors in the industrial strategy outlined by Cable (2012) provide an important starting point. Having some foresight ahead of a closure, and a sense that the decision could be influenced, would also strengthen a case for intervention.
- 3.14 In the current context, it was noted that the rationales for intervention ought to align also with current packages/programmes of support that could be leveraged, e.g. Regional Growth Fund (RGF), National Apprenticeship Service (NAS), Manufacturing Advisory Service (MAS), Advanced Manufacturing Supply Chain Initiative (AMSCI), UK Trade and Investment (UKTI) support for exports, and support for R&D. These would also be relevant to supporting businesses in the supply chains relating to shocks. Further rationales could relate to helping perfectly viable businesses in times of distress where there may be path dependency or equity arguments, or perhaps imperfect information/uncertainty (e.g. in terms of knowledge of new products and/or new markets).

People

- 3.15 The rationale for intervening in labour markets can be related to uncertainty⁴ and information asymmetries⁵ (e.g. in the case of job brokerage and careers advice) and externalities⁶ (e.g. in the case of training and skills support). As reported earlier in this chapter, the effects on workers can be dependent on the characteristics of those concerned. Those with more transferable skills, higher levels of skills with associated qualifications, and higher levels of occupational mobility are likely to be operating in more dynamic and efficient labour markets. They may have appropriate qualifications that can demonstrate their skills, and their greater mobility means that they will be able to consider a wider range of possible job opportunities. In contrast, some of the key characteristics set out earlier may prompt intervention on the following grounds:
 - those with skills, but no qualifications, may not be able to demonstrate readily the skills to a prospective employer (the absence of the qualification means that there is an absence of an appropriate market signal)
 - those with specific skills that are not transferable may require assistance to identify
 alternative careers and gain the necessary skills/qualifications to be able to apply
 for jobs effectively.
- 3.16 Specifically in the context of business closures, rationales for assisting workers have been set out in terms of coordination and information failures, with the public sector seen as

⁶ Externalities occur when some of *either the costs or the benefits* are not borne or captured by those undertaking the activity. For example, those paying for training will not recoup all of the benefits as these tend to be split between current employers, future employers, individuals receiving training, and potentially wider society.



⁴ We have taken to using the term 'uncertainty' to mean that there is an absence of information and it is not possible to apply a probability to the fact in question (where a probability can be applied, this would constitute a certain level of 'risk').

⁵ Information gaps or asymmetries mean that: decision-makers face gaps because information does not exist or is expensive or otherwise difficult to obtain; and/or information is held by one side in a transaction, but it is difficult to signal certain attributes. For example, it may be difficult to signal that one has certain skills if it cannot be justified by possessing a particular qualification.

having an important role to play at the interface between labour demand and supply (Bailey *et al.*, 2008). The case for intervening may also be particularly highlighted when the economy concerned is peripheral or isolated, and quite literally workers have nowhere else to go for work. This was the case with the rundown at Barrow, at BNFL Sellafield as powergeneration activities wound down in the 1990s, and most noticeably in some of the coalfield areas.

- 3.17 In addition, there may be other rationales, such as institutional failures if workers have not been able to collect redundancy payments (e.g. because closing businesses have not been able to pay), and if there has been an erosion in the abilities of workers to seek advice and employment (e.g. if they have been with the same employer for a long period of time).
- 3.18 'Mainstream' intervention covers some of the issues outlined above, in particular:
 - redundancy legislation and payments through the Redundancy Payments Service
 - advice and guidance, and assistance with job search from Jobcentre Plus (the Rapid Response Service and Talent Retention Scheme can also be used here to provide more proactive support or wider job brokerage)
 - training provision (up to Level 2 qualifications) through the Adult Skills Budget and European Social Fund (ESF).
- 3.19 There may be cases for responses over and above this mainstream provision. The evidence reviewed does not contain explicit statements of rationales for intervention, but the following may be appropriate:
 - Given the scale of effects, it may be necessary to scale-up existing interventions to ensure that all workers can gain the support required.
 - There may be coordination/information failures in that workers may not be aware
 of the array of opportunities available, or the wider range of employers that may be
 recruiting and there may be bounded rationality on the part of employment
 advisors. This may provide rationales for such activities as jobs and careers fairs,
 and coordination activities with employers, both locally and nationally, who may be
 recruiting.
 - There may be institutional failures that prevent workers from being eligible for training, or only eligible with some penalties. This may provide a rationale for relaxation of criteria. Some care is needed to ensure that action in does not of itself compound institutional failure. For example, in the case of VSEL the more financially attractive support to shipyard workers once redundancy had been spent was from the then available incapacity benefit regime. This meant that a large part of the former workforce essentially became hidden to the labour pool.
 - Training and skills development may be required at higher levels, including as part of top-up training in order to overcome information asymmetries between employers recruiting and workers looking for employment. Such top-up training could also include meeting necessary licences to practise, or health and safety or other such regulation.



Place

- 3.20 Earlier in the chapter, we identified a range of place effects. These may give rise to different rationales for government intervention:
 - There are likely to be equity/distributional arguments underpinning rationales to support particular places, in particular aligning with the rebalancing agenda. Related to this, path-dependency of areas suffering from industrial decline would also be a justification for intervening. For instance, the Selby coalfield task force was set up because of previous learning that had warned against leaving coal communities to themselves (Henderson and Shutt, 2004).
 - For specific issues around sites and the implicated local areas, there may be uncertainty that can be overcome through gap funding, remediation of land and infrastructure provision (for which there could also be public goods⁷ arguments). In addition, high levels of risk in deprived areas may mean businesses decide rationally not to invest (thereby allocating resources appropriately); there may be an equity argument for providing gap funding or pump priming to reduce the risk for investors.
 - Similarly, there may be a rationale to coordinate with site owners who are leaving, and then new owners, to ensure opportunities are maximised. By not working with AstraZeneca in finding a successor to its Charnwood site, it is said that an opportunity to replace the company with a presence of similarly high impact would have been missed. This continues now through the work of local partners with the site's new owner.
 - More holistic place-based responses are likely to include interventions relating to growing indigenous businesses, attracting new investors, and supporting education and skills development. Therefore, there will be rationales relating to these different areas as well (e.g. imperfect information in terms of new investment, asymmetries of information in supporting new businesses, and positive externalities relating to skills development).

Key points and implications for decision-taking

- 3.21 To summarise, this chapter has set out the potential effects of shocks under Business, People and Place domains and the rationales that might underpin intervention. A number of key points emerge for a decision-taking framework:
 - Assessments of the effects of shocks need to consider each one on a case-by-case basis. This chapter has, however, provided the key issues to be alert to, for example the different types of businesses that may be affected, how to understand the effects on people, and the range of possible place-based issues. It has also shown that assessing the overall effect of a shock needs to take into consideration that

⁷ Public goods can be caused by either one or both of the following: one consumer's use of the good does not prevent another's use; supplier cannot stop people who do not pay from consuming the good. In the case of transport infrastructure such as roads, unless tolls are imposed a supplier cannot stop people who do not pay from consuming the good.



something will happen anyway, i.e. workers may well find alternative destinations before closure, and some positive effects may emerge through, for example, new business creation. But clearly, the realities of straight economic geography may mean that this is not always the case.

- The assessment has been seen to be very important in understanding rationales for intervention. For example, the characteristics of the workforce affected are quite fundamental in presenting a case for government support for these workers. For labour that is more flexible it is quite hard to present a case for significant government support, as compared to workers facing multiple barriers.
- Understanding the rationale for intervening at the level of a business that is closing/may close is quite challenging, and again needs to be considered on a caseby-case basis. The material above highlights the importance of a national strategic framework, but also the simple issues of whether the shock has been foreseen and can be influenced.
- There are important and complex interplays and feedback loops between the business, people and place domains. In the examples of more substantive shocks affecting all three domains, there is likely to be a strong case for intervention, and an holistic approach to the response may be appropriate as part of local/regional restructuring/resilience. However, the case study material highlights that this can be challenging to deliver, especially in tough economic contexts chapter 5 includes a case example of this from the North West of England.



Responding to shocks – theoretical and practical frameworks

4.1 This chapter sets out evidence on theoretical and practical frameworks in the literature on shocks. This informs, in part, how we might learn from past responses to shocks, covered in chapter 5, and the framework architecture set out in chapter 7.

Shock origins and processes

4.2 Pike (2005) provides a useful summary of the range of factors and the causation of closures (and subsequent trajectories of closures), pointing often to the combinations of relations between employers, their workforce, unions and public agencies. The process he sets out, reproduced in Table 4-1, shows the iterative nature from the origins and causes, through to the different forms of dialogue and, in some cases, resistance to closure. He notes that there are different opportunities to intervene in the closure process.

There is more than one 'moment' and possible agency through which to intervene in a closure process. These may include: challenging corporate authority (e.g. through shareholder activism against short-termism and underinvestment); prompting and supporting public debate and a more accountable politics of economic development able to question why closures are happening and consider alternative strategies; and developing innovative public interventions to salvage the fragments and reintegrate discarded assets back into regional economies as part of building institutional capacity to deal with increased cases of closures. (Pike, 2005, p112)

Table 4-1: Examples of potential moments and potential causation in a closure process trajectory

Moment	Causation
Origins of decline	Declining profitability
	Import penetration
	Market share loss
	Organisational marginalisation
	Technological obsolescence
	Under-investment
	Weak productivity
Closure proposal and decision	Intra-corporate investment competition
	Increased costs
	Loan foreclosure
	Recession
	Re-location of activities
	Structural demand shifts
Responses of agents	Collective "anti-closure" campaigns
, ,	Individual and/or collective acceptance and/or resistance
	Industrial action
	Public policy and institutional intervention
	Political lobbying (local, regional, national, international)



Moment	Causation
	Public demonstrations
Impact of closure	Employment loss
	Increased social subsidy
	Lost income
	Negative multipliers in local goods and services markets
	Undermined local/regional prosperity
Competition and/or conflict	Alternative rescue plans
	Competing buyers
	Legislative challenges
	Local and parent company management disagreements
	Facility occupation and/or "work-in"
	Vandalism of products and/or facilities
Co-operation and/or collaboration	Management, workforce and trade union acceptance or collective mobilisation/resistance to closure
	Planned rationalisation
	Redundancy
	Re-training and/or redeployment of workforce
	Sale of business and/or facility
	Voluntary severance
Dissolution	Retraining effort
	Former employee job turnover
	Failure/closure or growth/expansion of rescued business(es)
	Demolition and site redevelopment
	Legal challenge settlement

Source: Pike (2005), drawing on Fothergill and Guy (1990, p78), Watts and Stafford (1986, p221)

- 4.3 The different 'moments' referred to by Pike (2005) suggest that a framework for determining a response may need to be dynamic, in the sense that it may need to be revisited on more than one occasion in a shock process. For example, the initial focus might be on whether the business closing/rationalising can be persuaded to change its mind (and indeed whether there is a rationale for government intervention to support this decision). If this is successful, then the attention required on other elements such as workers, supply chains and wider economic development in the locality may be reduced though some consideration of up-skilling workers and making supply chains more competitive may be part of the negotiation process with the business. If the business cannot be persuaded to change its mind, then a framework for decision-taking may need to be considered again, to explore what could and should be done with respect to workers who are about to be made redundant, the supply chain and the wider local economy.
- 4.4 Hill *et al.* (2011) take a slightly different tack on origins and processes, by considering how sectoral shocks affect the prosperity of places, and whether they have resilience to respond. They draw on examples from the United States, exploring how economic recession or sectoral trends have affected the key industries of different places, e.g. the automotive sector in Detroit and Cleveland, aerospace and then telecoms in Seattle, and military presence in Grand Forks. It is therefore the historical growth and subsequent dependence on key sectors, which then decline in the event of changes in markets, which in turn affect local and



regional economies. The question of response is therefore about planning through instilling greater resilience.

- 4.5 Drawing on the European Commission (2010), Cadell (2008), wider literature on developing regional resilience (e.g. Wolfe, 2010, and Hassink, 2005), and consultation feedback, we can identify different time periods when response to restructuring may be appropriate:
 - before any closure/rationalisation announcement, which the European Commission (2010) splits into two different strands: more 'permanent' planning actions, such as promoting employability through internal mobility and permanent task forces around specific sectors; and actions immediately prior to the announcement of layoffs, such as supporting companies facing crisis
 - during closure/rationalisation, i.e. at the time of the announcement and consultation process, which includes actions such as mapping effects across the value chain and involving workers' representatives in restructuring processes
 - after the announcement and consultation process, through short-term actions, such as worker redeployment
 - in the longer-term actions to support regeneration and possibly wider restructuring (such as through science and technology park developments, implementation of actions to support economic development and resilient regions).

Institutional and regional/local contexts

- 4.6 The example cited by Pike (2005) is interesting in terms of the institutional relationships. The business closing is described as being disengaged from the process, and another reason cited for the unsuccessful attempts to prevent closure is the adversarial stance taken by the union-led response. This raises a number of important facets of a shock and the response to it:
 - stakeholder relations are likely to be complicated, and the issues emotive a rational framework is potentially a useful device to inform decision-taking in an objective and constructive way, though it needs to be deployed with sensitivity
 - given complex stakeholder relations, responses to shocks need to consider appropriate *forms* (that is the structures, processes and models adopted) as part of the response design this ought to be done in a way that is, as far as possible, evidence-based and politically neutral
 - cooperation and engagement between key partners may be important in the success of responses, and in the case of changing business decisions, some consideration of influence-ability is important.
- 4.7 The types of appropriate actions that can be provided in response to a shock may be dependent on the institutional context and culture. Pike (2005) describes an uncooperative approach between stakeholders. This may contrast with more coordinated and cooperative approaches taken in other countries. Indeed the next chapter highlights how the response to shipyard closures in Gothenburg was highly coordinated. The European Commission (2010)



refers to a number of examples of responses from across Europe, and highlights the importance of thinking about context before practice is transferred to other places. For instance, a number of examples relate to coordinated and participative approaches, which work well in cooperative Nordic and more planned Western European relations, but may be less well-suited to the UK in general. Although it should be noted that the response to prevent the closure of GM at Ellesmere Port was well-coordinated, including through representation and contribution from government, Ministers, GM itself and unions (on behalf of the workers) – and the same could be said regarding Jaguar Land Rover at Castle Bromwich. The European Commission report characterises different stances taken to closures between different nations from the 1980s, with the pattern noted as being broadly similar in the 2000s albeit with more emphasis on training, and a greater role for territorial (i.e. regional and local) responses. The pattern noted is as follows:

- UK focus in the 1980s was more on the external labour market with less emphasis on labour market policies (i.e. relying on a *laissez-faire* functioning of the open labour market), though the paper notes the increasing emphasis in the 1990s and 2000s towards training and worker quality.
- France, Germany and Belgium focus is more on the internal labour market (i.e. organising responses within particular organisations and their own labour markets), with more active labour market policies to create a social plan.
- Sweden focus is more on the professional labour market and active labour market policies to provide training/retraining through a negotiated regime.
- 4.8 Extending Hill et al.'s (2011) representation from above highlights the importance of the local and regional context. This combines a number of different issues, including the institutional arrangements for local and regional economic development, and the underlying factors that affect economic growth (i.e. the interplay presented in Figure 3.1 in chapter 3) such as human capital, infrastructure, sectoral composition and diversification, and strength of exports. This would have implications for how you might treat shocks. As indicated by Schumpeter (1942), they are a part of the natural churn of capitalist economies. They may require immediate responses in terms of the workforce, supply chain and property/ infrastructure assets left behind, but longer-term response needs to be holistic, and set in the context of economic restructuring. Therefore, longer-term responses would benefit from following a strategic approach that could use such frameworks as SWOT⁸ assessments. Flipping this around, drawing on the notion of resilient regions (e.g. Hill et al., 2011; Wolfe, 2010), this type of approach could be seen as a means of increasing the ability of a local economy to deal with shocks, with less requirement for additional intervention. In the current European policy context, this pre- or post-shock response might imply the type of approach emphasised through Research and Innovation Strategies and smart specialisation in considering longer-term responses (European Commission, 2012).
- 4.9 Therefore, the recurring implication is to be mindful of the context of shocks, and in particular the stakeholder relations, which can vary, and the regional/local context. An important caveat is that whilst good practice from international examples is potentially

⁸ Strengths, Weaknesses, Opportunities, Threats



interesting, and a useful addition to the menu of options available, caution is needed before transferring it to the UK.

Framework for responding to the recession

- 4.10 Chapain *et al.* (2011) set out a framework for local authorities in responding to the recession, taking account of the "waves" of effects through the credit crunch, employment and unemployment, and ripple effects. This provides a useful underpinning process to local authority decisions, with seven steps set out in Table 4-2.
- 4.11 Whilst not using the same language, this considers similar sets of issues to our research, for instance:
 - referring to "intelligence gathering" in considering the causes, nature and potential effects of a shock
 - looking at existing initiatives, i.e. response functions
 - considering strengths of partnerships, i.e. response forms.

Table 4-2: Strategic framework for analysing intervention for local authorities' responses to the recession

Step	Issues covered and implications for this framework
1. Intelligence gathering	How local economy, businesses, sectors, people and communities affected by the recession
	Similar diagnosis of a specific shock would be required
2. Strengths of local authority finances, initiatives and partnerships	Effect on local income streams; and initiatives and partnerships in place already
	Similar consideration of partnerships to inform response forms; consider existing initiatives so response actions are not duplicative
Coordination of activities and division of organisation responsibilities	Clear division of responsibilities in light of existing agency partnerships
	Need to build on existing relationships; structures/ models to include clear reporting processes
4. Signposting of information and one-stop-shop facilities	Clear communications and access to existing services
	Response actions incorporate signposting, but also leveraging of other initiatives that may require bidding and/or bending
5. Local authority actions	Support to business, communities and individuals, wider regeneration
	Implementation broadly fits business, workforce and place domains – need to consider communities side as well as specifically workers
6. Monitoring	Monitor actions and outcomes, and the wider situation
	As part of implementation incorporate review/refinement, as well as monitoring & evaluation of performance
7. Strengthen institutional capacities	Learn from activities; make representations to central government; flexible to changes and opportunities
	Take account within refinement stage; also need to bear in mind the 'exit' of the response

Source: Based on Chapain et al. (2011)



Implications

- 4.12 Drawing on the study's literature review, this short chapter has headlined a selection of previous approaches to creating theoretical and practical frameworks with which to understand shocks. There are some key implications that are taken from this chapter as the case study material in chapter 5 is reviewed, and a proposed framework is set out in chapter 7. The key implications are as follows:
 - there are different "moments" within shock processes, and these can provide their own opportunities for responses – therefore, any framework of itself needs to be agile, and to be capable of responding to the different stages of the shock life-cycle as it unfolds
 - drawing on this, and the need to monitor changes in events over time, the framework should not be static, rather the intelligence gathering relating to a shock should be reviewed iteratively
 - stakeholder relations can be important in determining success or otherwise of shock
 responses and this, along with consideration of existing partnership arrangements,
 should be an important part of the shock response decision-taking; the capability,
 resilience and clarity of such relationships is a key consideration in determining the
 appropriate response forms
 - there are likely to be existing activities in play already that can be part of a shock response, and so determining actions should consider signposting and coordination
 - the institutional and cultural context may be a key determinant on whether actions
 are likely to be effective, and so the transfer of practice needs to take this into
 account, especially good practice from international contexts where cooperation and
 coordination are more prevalent characteristics of the economic development
 process
 - the steps set out by Chapain *et al.* (2011) provide a useful starting point to developing a process for understanding and responding to shocks.



Options for government response

- 5.1 This chapter sets out the evidence on previous responses to shocks. This is done through case examples, drawing on current and historic UK policy contexts, and international practice. The focus here is to identify what has worked well (and less well) in the past, so as to provide useful evidence to inform future responses. The case study templates used are set out using a consistent structure, covering the nature of the shock, impact, response functions, response forms, time duration of responses, evidence on effectiveness, and lessons.
- 5.2 We have split case studies under different headings, as follows:
 - long-view responses, drawn from the 1970s-90s, where there is evidence of how long run responses to shocks have been progressed, and the substantive results that have been achieved
 - automotive responses, in particular in the context of the regional model (under Regional Development Agencies (RDAs))
 - responses under the current institutional context, recognising that it is still early days in some of the cases to comment definitively on effectiveness
 - private sector engagement in responses to shocks
 - responses to disasters and other events.
- 5.3 Within the resourcing of the study, the case studies are not intended to be all-encompassing, either in their specific detail or across the wide range of shock events that the UK has experienced in the last two decades. They do provide, however, illuminating insights as to what was done in often idiosyncratic contexts, and the process and capability dimensions which consistently appear to be at least as important as the availability of cash resources.

Historic and long-term responses

5.4 The rundown of Vickers Shipbuilding and Engineering Ltd (VSEL) in the 1990s affected a significant proportion of the local workforce, nearly one-third. Despite the scale of the shock in workforce terms, the response with respect to people was limited. Instead, the focus of response was on the diversification of the economy through new business creation and the improvement of the place's land and property offer. This was led by the newly-created Furness Enterprise and involved some national funding as pump priming, English Estatesled property and infrastructure schemes, and Assisted Area Status – see Table 5-1 for the detail. In Table 5-2, a different shipyard closure example is provided through Norra Alvstranden in Gothenburg in the 1970s. As the table identifies, there was significant effort to help workers, which was decoupled from a much longer-term place-based approach that took some years to get moving. Whilst from very different contexts, there are some common points to note:



- Both responses have been generational: Cadell (2008) notes that the regeneration of the area of Gothenburg is still being undertaken, some 20+ years after its start. In the case of Barrow-in-Furness, Furness Enterprise believes that it has more or less 'broken even' in terms of new jobs created and jobs safeguarded versus the jobs lost following the rundown of VSEL. The impact on the people losing their jobs is probably also long-lasting, as it is suspected that many will have gone on to incapacity benefit and stayed on these benefits thereafter. These generational effects echo other significant industrial declines, such as in the UK's coalfields. The importance of the long-term for regeneration (as part of restructuring efforts) has been noted in a range of other literature. SQW and BBP's (2001) study on best practice regeneration looked at several case studies. A very consistent theme emerged that regeneration had to be seen as a long-term process, and one that was not simply about physical development, but also considered the developments of people, businesses and the fabric of a place.
- The response in relation to workers was significantly different, both by design, and in reality. There was coordinated action to find destinations for workers in Gothenburg, assisted by managed decline of the shipyards facilitated by the state, and there were reported to be few formal redundancies and only a small increase in unemployment. In Barrow-in-Furness, there was little response over and above the mainstream service with respect to workers, compounded by the area's isolated and peripheral location. No doubt, the diversity and 'thickness' of the economic base helped to ensure effective action in Gothenburg.
- There was a quicker response in Barrow-in-Furness on economic restructuring: Whilst the response in Gothenburg took some time to get started, potentially aided by being able to decouple people issues from regeneration imperatives, in Barrow-in-Furness, there was quick action assisted by pump priming funding.

Case 1: VSEL

Table 5-1: Run-down of VSEL, Barrow-in-Furness in Cumbria

Nature of shock,
including timescale

Barrow in Furness, located in South Cumbria, is a long-standing centre for shipbuilding and marine engineering, developed on the back of iron and steel production, and large scale port development. Its isolated and peripheral location in the North of England made it an ideal centre for strategic defence manufacture. Since the Second World War, the shipyard had until 1990 employed between 10,000 and 14,000 people, dominating the local economy.

Throughout the 1980s and under the management of VSEL, the yard had become increasingly concentrated and dependent on defence markets generally, and the Trident nuclear submarine programme specifically. So much so, that by 1990, 85% (and rising) of the then 13k workforce were dependent on Trident production.

The economic shock occurred in 1990/1991, when it was announced that the Trident programme would be wound-down, following the end of the Cold War and the associated reductions in the national defence budget. Between then and 1995, 13,000 jobs were lost at the yard and in the local supply chain.

Impact on business, people, place

In the period 1990-1995, 9,000 jobs were lost in the shipyard itself, with a further 4k in the local supply chain. The scale of employment loss represented 30% of all local employment (as at 1990), with massive implications for business resilience, confidence, and future prospects.

Not unexpectedly, there were also major implications for Place, resulting from large



tracts of land/production space being mothballed at the shipyard, and a major collapse in the town centre's retail offer (and associated investment intents by national chains), as local spending power fell away.

At the level of People, there were huge implications for time-served marine engineers, with their highly specialist skills (generally not formalised), their mindsets (shaped by industrial paternalism), and Barrow's peripherality and poor transport linkages meaning that most workers were not generally available to the wider labour market. Quite literally, a generation of families dependent first on redundancy payments and then on incapacity benefit (which was financially more advantageous than formal unemployment benefit) came into being.

Response functions: rationales and actions

Essentially no preparatory work was undertaken in preparation for the shock, so there was an immediate need to move quickly and convincingly. This took the form of the Cumbria Action Force, involving an on-the-ground secondee from Government Office North West, with pot of £1 million of discretionary funding (split equally between Barrow and West Cumbria, where nuclear decommissioning effects were starting to impact on that area's local labour market) to initiate and launch activity.

On Business, recognising the scale of the shock and the narrowness of the existing base, the key function was to stimulate new enterprise, encourage the growth of established firms, and attract inward investment. These three activities became the core mission of Furness Enterprise (see below). The policy rationales for these activities were around information asymmetries and public goods.

On Place, the key requirements were to improve the image of Barrow as a centre for business activity, to improve the local land and property offer to investors, and to improve communication access. Again, the rationales in play were information asymmetries and public goods. In response, investments were made to dual parts of the A590, and to build finally the long-planned Dalton bypass. A new business park was designated locally, and a suite of modern/advance factory units constructed subsequently to provide a rounded and convincing local property offer for small and medium-size businesses.

On People, actions were largely 'normal business' i.e. routing affected individuals into employment and sickness programmes. These People actions of themselves created major coordination issues, with the greater financial value and non-means tested nature of incapacity support being favoured (and to a degree promoted locally) in favour to employment benefits. As a result, the actual scale of genuine unemployment effects was masked significantly in the official data from the outset.

Response forms: structures, processes and partnerships A range of forms and structures were deployed. Simultaneous with the announcement of the yard's rundown, the Cumbria Action Team was established as a short-term response to generate momentum. Shortly thereafter, Furness Enterprise (FE) was established as a public/private partnership to drive forward the local business/enterprise and diversification agenda. FE was built largely around the then established enterprise agency model, but with a strong inward investment angle included within its remit. For its part, VSEL sought to diversify (as it turned out abortively) into the production of surface ships but time and markets were against it. Late in the1990s, a chronically weakened VSEL was sold to Marconi/GEC, and then on to BAE Systems, its current owner.

On Places, less emphasis was given to new structures per se, but existing ones were encouraged to work together more purposefully. So, the local authority recognised quickly the need for a more relaxed planning approach to economic development locally, and was able quickly to release land. English Estates (which at that stage had a subregional office in Cumbria) was then able to bring promptly its well-proven industrial factory product to Barrow, with the result that Barrow Enterprise Park was brought quickly to market to provide an attractive property offer to in-moving or indigenous relocators

The People component of the response was the most traditional of the three elements, with the job centre and work/pension infrastructures dealing efficiently and pragmatically, but with essentially standard products, with those impacted by the shock.

A particular emphasis of FE's approach was to commission expert consultancy to openup local thinking, encourage medium-term planning (i.e. 10–15 years forward), and to provide a local economic development framework within which different elements of



action could be organised/decided rationally. A key element of consultancy work was to
build and make the case for Assisted Area status for Barrow, which it subsequently
received, providing access to flexible and discretionary Regional Selective Assistance.

Time duration of responses

The Cumbria Action Team, immediately established, ran for about 12 months. At that point (in 1991), FE was ready for launch, and is still operating today. Barrow Enterprise Park was released in development phases from 1992 onwards, and still operates as the area's prime provider of flexible and variable size accommodation for indigenous firms and in-movers.

Evidence on the effectiveness of the response

Since 1991, FE has created/safeguarded 9,800 and 3,500 new and safeguarded jobs, respectively⁹. In headline terms, therefore, the jobs lost between 1990 and 1995 have been replaced numerically in the 1992–2013 period. These jobs span a broad range of sectors, (covering electrical engineering and plant hire, through to film production, and onto publications and commercial cleaning); as a result, the economy is more diverse and balanced, but probably less highly skilled and expert than it was when dominated by VSEL.

Submarine and advanced marine engineering activities continue at Barrow, where employment is now in the order of 2,000-3,000 people.

Lessons and implications

What worked well? Six things are noteworthy:

- The 'clean' pump-priming cash made available as part of the Cumbria Action Team
 was helpful in getting resource quickly on ground. The consistent view is that the
 availability of some cash to move quickly was actually more important than the
 potential of more cash coming at a later stage.
- 'Proper' consultancy opened-up local thinking, encouraged planning for the mediumterm, and provided a local strategy within which to choose/organise what to do.
 Consultancy work was helpful in highlighting experience from elsewhere, and making network connections of value to the local area (for example, encouraging Barrow to become part of the European network of Restructuring Shipyard Areas).
- Furness Enterprise provided a mandated focus for local public/private actors to 'get behind,' with its role being championed regionally and in Whitehall through the involvement of senior directors from the then Government Office North West.
 Importantly, a key emphasis in assembling the Board for Furness Enterprise was to secure quality people with action powers, rather than opting for organisational representation.
- The successful case for Assisted Area status unlocked Regional Selective Assistance, and provided a funding tool to give edge and certainty to Furness Enterprise's inward investment endeavours.
- The numbers of jobs lost have largely been replaced but the time over which
 efforts have had to be maintained to achieve this has spanned over two decades.
 The Barrow experience, and similar examples of 'extreme' local shocks elsewhere
 (such as the Coalfields), highlight the need for long and sustained commitment to
 resolving the effects of shocks.

What worked less well? Three things are evident from the case study:

- VSEL had allowed itself to become too dependent on too narrow a base of
 activities, and by virtue of its sector simply could not move quickly enough to
 diversify into new areas. Anticipating shocks is as much a company responsibility
 as it is for any government administration.
- No serious attention was given to skills safeguarding, and how, from a defence
 perspective, a nationally strategic 'people' resource might be maintained. Tellingly,
 a significant number of the skill shortages experienced in implementing the
 subsequent ASTUTE submarine programme were very similar to those released
 from the Barrow shipyard 10-15 years earlier.
- Institutional failures in the benefits system- i.e. incapacity benefit being preferred to unemployment benefit - essentially locked a significant number of redundant workers into life-long dependency.

 $^{^{\}rm 9}$ Furness Enterprise, Chairman and Chief Executive's 2010 Review, March 2010



Case 2: Gothenburg

Table 5-2: Closure of shipyards in Norra Alvstranden, Gothenburg – drawing on Cadell (2008)

Nature of shock, including timescale	Decline and effective closure of the whole shipyards sector with a loss of 15,000 jobs. Key causes: oil price shocks, and international competition. Significant job losses in relatively short period in late 1970s, but also continued decline thereafter to the start of the 1990s – this was partly deliberate as part of a managed process.
Impact on business, people, place	People: significant in number at nearly 15,000; a relatively large proportion were older workers; workers had specific industrial skills, e.g. relating to engineering, engineering construction and maritime/offshore experience. Place: a particular area of Gothenburg (Norra Alvstranden), consisting of 290 hectares was affected. The area was mainly industrial – with the closure of the shipyards it essentially consisted of a large swathe of derelict land and premises.
Response functions: rationales and actions	 Cadell (2008) is not specific on rationales, though we can infer from the material the following key points: Coordination and information failures in terms of matching redundant workers to job opportunities – in particular given scale of job losses. Degree of dereliction associated with the site, with high levels of risk associated for any investors. The focus of the response was on workers and the place, though each of these was treated separately. Workforce responses were exemplified by collaboration, between Trade Unions the City, the employer (Swedeyard, a nationalised company), the Labour Market Board, local businesses and others. Yards were merged and closed sequentially. Some short-term work was found on an oil platform, which itself went bankrupt. Some engineering staff went to work for a newly-established technical consulting company. The pension age was reduced to 58½, c. one-third took early retirement. Expanding local companies (including Volvo) made special efforts to find positions for workers. Training schemes were organised by the Labour Market Board to enable people to gain new skills. Regeneration of the place took much longer with different masterplans developed (e.g. one based on offshore oil platforms and a second on housing), before a knowledge centre became established around colleges, and subsequently an IT cluster.
Response forms: structures, processes and partnerships	As described above, the people-based response was delivered through a very cooperative partnership involving Trade Unions, the City, the employer, Labour Market Board and local businesses. Two key features emerge: the interventionist approach whereby the shipyards were merged and taken into state ownership to manage their closures; the fact that local employers were well-engaged in the response given that they were seen as critical in finding alternative employment opportunities for workers. On place-based regeneration, a separate organisation owned by the City Council, operating within commercial parameters, was set up. There was stability within this institution to lead regeneration of the area, and its asset-based and ability to borrow through commercial terms meant that it had financial longevity.
Time duration of responses	People responses were decoupled from the longer-term place-based responses, which have taken 25 years and are still on-going.
Evidence on the effectiveness of the response	On the people side, it is seen as an effective response. Cadell (2008) notes that there were very few redundancies, given the managed process, and unemployment in Gothenburg never got above 4% at the height of the closures. On the place side, the regeneration is seen as effective, because it has benefited the whole city and has been built on education, skills and innovation.
Lessons and implications	Decoupling of the response to deal with workers (predominantly short-term response) from that which dealt with the place and assets. The latter is significantly a long-term venture – at 50 years. Structures: permanency of structure for regeneration under private sector ethos; cooperative model for workers. Need to caveat the differing institutional context, with a more cooperative culture and a more decentralised model of local government.



Automotive responses and the regional model

- 5.5 The UK has much experience of auto plant closures (for example Ford in Dagenham, Jaguar Brown's Lane, MG Rover at Longbridge, Peugeot in Coventry, LDV, and more recently Ford in Southampton and Honda in Swindon). A wider European 'grand restructuring' is now beginning given the slowdown in the European market and on-going over-capacity issues. Sometimes actions can be taken to improve competitiveness and flexibility and hence to prevent closure - witness the proactive and pre-emptive pursuit by English Partnerships and local authority partners of a new supplier park for Ford at Halewood (now operated by Jaguar Land Rover), as the end of Escort production at the plant approached, and the very flexible response of management and workers at both Jaguar Castle Bromwich and GM Ellesmere Port in recent years to help firms which were looking at closing plants to get costs down and keep plants open. The response to saving GM at Ellesmere Port was multi-faceted: workers made concessions to help keep costs downs; the strengths of the plant, relative to others that might be closed elsewhere in Europe, were elucidated clearly to GM management; and a package of existing programmes and funds were used to help persuade GM of a strong future for the plant, e.g. National Apprenticeship Service, R&D funding, prospects of Regional Growth Funds, and AMSCI. The response was facilitated by close working between Ministers, Government (including BIS, HM Treasury, CLG, the Foreign Office, UKTI, and Local Authorities), GM itself and unions.
- 5.6 The response to MG Rover led to key lessons being learned, which have been mainstreamed today via SFA (Skills Funding Agency) and Job Centre Plus. Key points to note regarding automotive closure shocks include: having capacity to gather and interpret intelligence so as to provide forewarning (this is often possible in this industry as trends in output, investment and performance can be monitored); the need to act quickly following the shock; partnership working between different actors with clearly identified roles and a division of tasks; and the ability of partners to actually deliver interventions. The ability to use funding flexibly - e.g. ESF funding (European Social Fund) - was seen as key to dealing with these shocks. Multi-level governance was often helpful in this regard, with local/regional tiers given freedom to tailor responses to suit local needs, using flexible funding and associated discussion where possible. In the current context, it is noted that there is less flexibility in this regard. In addition, national responses were helpful where a particular need was identified locally (as happened in the MG Rover case and with the automotive dimension of the West Midlands Regional Task Force, e.g. on the relaxation of the '16 hour' rule and the introduction of the automotive scrappage scheme to underpin demand).
- In addition, a feature of some of the responses, e.g. MG Rover (see Table 5-3), has been the regional or local coordination. Advantage West Midlands (AWM) played a critical role in the leadership and coordination of the response to the closure of MG Rover, and was able to marshal the discretionary resource required as part of a programme of actions. This then led to significant organisational learning and development, and so when there were subsequent shocks in the region there was institutional memory and learning to draw on, e.g. the Transition Loan Fund in response to the recession following a model similar to that of MG Rover. There was also learning between partners that contributed to the subsequent response to the closure of LDV in Birmingham in 2009 (see Table 4-4). Here, Birmingham City Council led the response, with support from AWM and others including Jobcentre Plus and Learning and Skills Council. These last two were able to draw on their experience of



working together under MG Rover. The LDV example is also instructive, because Birmingham City Council had been close to LDV for a number of years, had contributed to the implementation of mitigating actions, and had developed strong intelligence on where workers and suppliers were located.

Case 3: MG Rover

Table 5-3: Closure of MG Rover in Longbridge, Birmingham

Nature of shock, including timescale	Final closure in 2005 after a 'slow burn' long run decline in the context of over-capacity in the auto industry. First warning of closure was in 2000 when BMW pulled out and sold the firm to a local consortium for a nominal fee. The five years of continued operation did at least provide suppliers time to adjust and enable a run down in employment from 15,000 at Longbridge to 6,300 at the time of closure.
Impact on business, people, place	6,300 jobs were lost at MG Rover and Powertrain, and around 3,000 in the supply chain. Some £1.4billion was owed to creditors. The number of supply chain firms depending on MGR for over 20% of sales had dropped from 161 to 74 (between 2000 and 2005), with 57 in the West Midlands region at the time of closure (Bailey and Kobayashi, 2008). Local impact on Northfield via reduced spending in shops etc. and concentration of workers in local area.
Response functions: rationales and actions	Business: Pre-closure: diversification & modernisation programme for supply chain. Post-closure: Advantage Transition Fund; HMRC tax holidays; Birmingham City Council (BCC) rate relief; Wage Replacement Scheme (3000 workers - 3 months); supplier diversification fund. People: tailored support for workers: support finding work; re-training at different levels, including accreditation of 'on the job' skills, upgrading, and switching into completely new jobs. Only 30% of ex MG Rover workers stayed in manufacturing (Bailey et al, 2012). Place: pre-closure: AWM took part of the site to develop a technology park (linked into AWM's wider planning of 'technology corridors'; St Modwen had purchased the site and hence responsible for regeneration (latter effectively stalled for several years). BCC tried to plug gaps regarding counselling, debt advice and social support.
Response forms: structures, processes and partnerships	The Task Force model brought key actors to the table (LSC, JCP, colleges, BCC, Accelerate/MAS, HMRC etc.). Accelerate/MAS had already mapped the supply chain, and the postcodes of workers were mapped so the spatial impact was known. The MG Rover Task Force used planning from the 2000 Rover Task Force in terms of: 1. Intelligence gathering; 2. the response that were ready to go when closure hit; and 3. Its impact being minimised by longer-term diversification efforts. The response was also placed into the context of the wider regional strategy (diversification, modernisation, spatial corridors, clusters policy).
Time duration of responses	Pre closure work took place over 2000-2005 in terms of supply chain diversification and upgrading. Immediate post closure response: wage replacement scheme ran for 3 months. ESF funding was used very flexibly to provide training and skills; this support effort was mainstreamed and later used in response to LDV.
Evidence on the effectiveness of the response	Pre-closure diversification work and five years of continued production enabled around 10,000 jobs in the supply chain to be 'saved' (Bailey and Kobayashi, 2008). Some 60% of ex workers had undertaken some form of retraining or education 3 years on and 90% were back into employment (Bailey et al, 2012) but there had been a significant drop in average incomes – around £5600 in real terms (ibid). The £3.4 million Wage Replacement Scheme helped 170 firms and kept around 3,000 workers in place for the critical weeks following the collapse, with 1,329 'confirmed' jobs being saved in this way (RTF2, 2006).
Lessons and implications	 A number of process lessons are apparent, including: need for capacity to gather and interpret intelligence need to act quickly following a shock need for partnership working between different actors with clearly identified roles



and division of tasks

- ability to deliver interventions
- need for strategic local/regional coordination
- need for communication with workers and businesses as to what support is available
- importance of organisational learning and development (such as development of Transition Loan Fund).

In terms of actions that were seen as effective, a number of points are instructive:

- ability to use funding flexibly e.g. ESF funding to provide tailored support to workers' needs
- the diversification support to supply chain companies, in particular in advance of the shock, but also once the shock occurred
- the package of support to workers over a period of time that resulted in high levels of positive destinations.

It should be noted that whilst a high proportion were in employment three years later, this was at a lower income, given the relatively high wages received at MG Rover. Therefore, in terms of assessing effectiveness, incomes may be a factor to track, though lower incomes may not necessarily constitute an ineffective response.

Case 4: LDV

Table 4-4: LDV closure, Washwood Heath, Birmingham

Nature of shock, including timescale	LDV went into administration in 2009 with loss of 850 jobs. Long term 'slow burn' as the firm struggled to find funding for model development and to compete with bigger players, and final collapse during credit crunch and auto industry slowdown over 2009.
Impact on business, people, place	850 jobs lost at the firm. Workers and suppliers were spread over a number of local authority areas (workers for example along the M42 and M6). No huge local 'place' impact (unlike MG Rover) but local shops etc. were affected. Supply chain already struggling as auto industry output fell by 50% over 2008-9, and concerns over key tier 1 and tier 2 suppliers closing or exiting the UK.
Response functions: rationales and actions	Pre closure: Birmingham City Council (BCC) had had involvement with the firm for many years and had attempted to slow the process of decline down through help on issues such as training and by ordering vehicles for the council. Earlier sale of land and lease back as part of previous rescue deal. Post closure – remediation of site (BCC role) but constrained location and need to consider infrastructure improvement. Desire by BCC to use site for manufacturing but as part of City 'economic zones' strategy frustrated by plan for High Speed 2 to use it as a maintenance depot. Regeneration of site effectively stalled for the medium term. Final closure: well-tested and immediate LSC/JCP intervention to support workers, drawing on lessons of MG Rover taskforce which had been mainstreamed after the latter crisis. ESF funds again used in a flexible way. Rate relief was offered to supply chain firms via local authorities, and HMRC holidays were used – this linked into the wider Regional Task Force work in use at the time. In addition, the Regional Task Force's Automotive Response Programme provided limited consultancy support to key supply chain firms to help them in – for example – diversifying or shifting up market. In addition, the Transition Loan Fund was reactivated as part of Regional Task Force, drawing on MG Rover lessons, and a significant %age of loans made were to the automotive sector (Berkeley et al, 2011).
Response forms: structures, processes and partnerships	A Taskforce approach was quickly mobilised to bring together key actors (e.g. LSC, JCP, MAS, HMRC) along with local authorities (Birmingham City Council (BCC) saw this as critical in making other local authorities realise the impact 'in their patch'), and there was relatively little in the way of a highly-localised impact.
Time duration of responses	Key lessons of the MG Rover task force were quickly learned where possible and applied again. For example, LSC and JCP extended the then mainstream programme which had grown out of the work undertaken for the MG Rover crisis and key flexible



funding streams such as ESF money were used to help workers move on through retraining at different levels (up to a point). Advance warning and preparation – as in the MG Rover case – was again seen as critical on a number of levels – such as knowing where workers lived, which firms would be affected, and in being able to 'hit the ground running'. That advance intelligence was in this case available via BCC's business partnerships officer who had been working with LDV for some time.

Evidence on the effectiveness of the response

BCC pre-closure intervention worked to some extent in slowing the decline down – for example employment was as high as 1,200 in 2005-6 and was gradually run down to 850 in 2008, with perhaps 600 finally affected when administration came in 2009 and even fewer workers needing to attend events such as jobs fairs as they had been able to move on. Slowing shocks down can help in enabling workers to be redeployed in the same industry through 'replacement demand' (Bailey et al, 2009). Evaluation of West Midlands Regional Taskforce which had a number of relevant actions (Transition Loan Fund, Automotive Response Programme) over 2008-9 showed value for money and effective outcomes (Coventry University, 2010).

Lessons and implications

Taskforce approach brought together key actors. Similar learning points as in MG Rover. Advance intelligence again was critical. But question in today's context is 'who picks up this information?' LEPs are not ideal vehicles for this role as private sector firms in distress are unlikely to share such information with other private sector players. Larger local authorities can play such a role. Framing response in wider local/regional strategy was also beneficial in placing the response in the local strategic context and needs. Flexible funding via ESF was again seen as highly beneficial, as was the ability of AWM to vie for money to deal with the auto slowdown (transition loan fund, automotive response programme). Whether RGF and AMSCI could be used today in a similar manner is less certain given bidding deadlines.

Responses in the current context

- In the current context, many responses to recent shocks have been led locally, e.g. by Local Authorities, with other input drawn from local agencies (e.g. Jobcentre Plus, Skills Funding Agency and other local authorities or Local Enterprise Partnerships), the employer itself in some cases, and partners such as unions. Central government input has been provided, in particular for larger shocks, and when there are issues of potential national significance a central government leadership role has been deployed. For example, the Department of Energy and Climate Change played a key role with respect to the closure of Coryton Oil Refinery in Thurrock, given the potential impact on fuel security, and BIS (and others) played a key role in the case of General Motors at Ellesmere Port.
- 5.9 In the area of the workforce and skills, there is a standard model. Mainstream intervention from the public sector is provided through Jobcentre Plus services, in conjunction with the Insolvency Service (on redundancy payments), and Skills Funding Agency and local colleges (providing Level 2 provision through the Adult Skills Budget and ESF). This may be supplemented by national initiatives such as:
 - the Rapid Response Service, which provides proactive services on CV writing, job search help, and advice, to workers at employers' own sites¹⁰
 - the Talent Retention Scheme, which provides brokerage for those workers with specific skills, e.g. in engineering, to help find them alternative sources of employment.

 $^{^{10}}$ This can only be delivered if there is sufficient notice so that services can be provided on an employer's site. If the closure is sudden, then this service may not possible, or may only be possible for a very short period of time.



- 5.10 In addition, in some cases employers themselves may provide resource to assist workers. For example, in both the case examples cited below, Pfizer (see Table 5-5) and Tata (see Table 5-6) provided resource to support workers find alternative sources of employment and/or training. The consultation process has identified that there is less discretionary resource and fewer flexibilities in funding streams to provide bespoke actions. Some bespoke actions have been facilitated by coordination and resource of partners, such as jobs fairs, and contact with employers locally and nationally who may be recruiting (e.g. in the case of the closure of Thames Steel in North Kent). The evidence on effectiveness in relation to workforce responses is relatively encouraging where this exists, and the examples of Pfizer and Tata suggest positive outcomes. However, it should be noted that these are two relatively favourable contexts, with Pfizer's workforce highly skilled and mobile (reducing the case for intervention by government in any case), and Tata's workers being able to take advantage of opportunities in associated sectors locally. It should be noted that the data provided sets out the 'gross' picture, i.e. the known outcomes associated with workers rather than the outcomes that can be attributed to the workforce response.
- 5.11 In terms of place-based responses to shocks, it is too early yet to comment on the effectiveness of responses in the current context. That said, some observations on the responses developed in recent years can be offered. These appear to have some hallmarks of the more historic response at VSEL, focusing on new business creation as part of diversification. For example, in the aftermath of Pfizer, Thames Steel and the closure of the Coryton Oil Refinery, central government resource (through Regional Growth Fund) has been used for grant/loan schemes to support new and existing business development and growth. In the case of Pfizer, this is part of a broader set of activities around Discovery Park (the former Pfizer site) and the wider East Kent area, which is now an Enterprise Zone. This highlights the reliance currently on identifying appropriate packages of support and bidding successfully into competitive processes to resource these, with Regional Growth Fund the current main potential source of funding. Of course, funds such as RGF tend to be deployed at discrete points in time, which may (or may not be) coincident with shock events and their life cycles, though applications to 'exceptional' RGF can now be made at any time.
- 5.12 A broader point to make is the varying capacity of local authorities to respond to shocks. Economic development remains largely a discretionary activity for local authorities, and they have less capacity (than RDAs) to provide their own funding and leverage additional resource, exacerbated by the austere spending environment. This can also affect specific issues around sites and premises: RDAs tended to buy key assets in the past, which prevented risks of demolition and inappropriate development; rates on empty property can result in incentives to demolish property. Local authorities also have varying capability to provide the appropriate intelligence to support responses, for example, in identifying suppliers and understanding the needs and keeping track of workers. In the case of some recent shocks, consultations suggested that many workers seemed to have 'disappeared from the system'.



Case 5: Pfizer's facility in Sandwich, Kent

Table 5-5: Pfizer's facility in Sandwich, Kent

Nature of shock, including timescale

Announced in Feb 2011 that 2,400 jobs were to go with the closure and sale of Pfizer's R&D facility in Kent. In June 2011, it was announced that 350 jobs would stay, and this increased to 650 in November 2011.

The key causes were changing business models in pharmaceuticals, in particular in R&D, and a need to rationalise R&D operations.

The site itself was sold as "Discovery Park" to Discovery Park Limited, a property development company.

Impact on business, people, place

With 650 jobs retained at Sandwich by Pfizer, and c. 250 people absorbed in other Pfizer sites, this left a residual of 1,500 redundant workers. These were highly-skilled and relatively mobile workers.

There have been various estimates of the scale of the full economic impact on East Kent, incorporating effects on supply chains and wider economic change in East Kent:

- Sandwich Economic Development Task Force (2011a) identified that the initial announcement of 2,400 job losses could mean a total loss of 4,000 jobs once the effects on contractors, supply chains and consumer spending were taken into account representing 2.6% of jobs in East Kent. [Taking account of the jobs Pfizer retained, reducing the 2,400 to 1,750 direct jobs, this would reduce the overall impact to just under 3,000 (and just under 2% of jobs in East Kent) based on similar multipliers SQW analysis].
- In August 2011, once it had emerged that 350 jobs would stay at Pfizer, the Sandwich Economic Development Task Force (2011b) reported an aggregate impact of 7,800 job losses across East Kent by the end of 2011, rising to 12,200 by 2018. This also took into account the decommissioning of the nuclear power station at Dungeness.

We understand through consultations that most of the effect on supply chains from Pfizer's downsizing was on companies that provided services to the site, such as caterers etc.

The analysis and the consultations undertaken emphasised that the effect on 'place' was arguably the most significant, with loss of competitiveness, knowledge-based workers and business, and household expenditure. Pfizer's downsizing signalled a reduction in size of a significant private sector employer in a relatively deprived area of East Kent.

Response functions: rationales and actions

Rationales partly based on equity/distributional reasons based on East Kent being relatively depressed, with an otherwise attractive site suffering from poor access, e.g. to London. Rationale was also based on supporting growth of new businesses that may otherwise struggle to secure finance (e.g. early stage life sciences businesses). Response actions as follows:

(i) East Kent awarded Enterprise Zone status, including Discovery Park (the Pfizer site). (ii) Kent County Council provided funding for grants/soft loans up to £20,000 for SMEs. (iii) £35million RGF for a business support package, including grants and soft loans. Eligible for any business in East Kent. (iv) £5m RGF to reduce journey times to London, matched with £5m from Network Rail. (v) Grow for It promotion of East Kent with UKTI support. (vi) Environment Agency funding of £20m for sea defences (to ensure investor confidence).

People-based response included significant input from Pfizer through provision of advice to workers and an outplacement service, supported by Jobcentre Plus mainstream activities, the Rapid Response Service, and SFA and Colleges (via the Adult Skills Budget and ESF).

Response forms: structures, processes and

Locally-led Task Force, led by Kent County Council and, with other members from Dover District Council, Pfizer, local MP, BBP Regeneration, Locate in Kent, BIS, British Venture Capital Association, University of Kent and SEEDA. A Skills and



partnerships

Employment sub-group was established to ensure coordination of actions between Pfizer, Jobcentre Plus and SFA. There was Ministerial interest in the Task Force. Initially the Task Force set a 30-day reporting cycle to ensure actions were quickly implemented. These first stages characterised as 'rallying' etc. until resource secured. Kent County Council commissioned a Growth Strategy as part of the response, so that actions could form part of a longer-term vision for the area.

Time duration of responses

Short-term actions, in particular relating to workers, finding a buyer for the site, and the initial fund established by Kent County Council. Other actions will be longer-running, e.g. around RGF and the Enterprise Zone. The development of a Growth Strategy may develop actions for the longer-term.

Evidence on the effectiveness of the response

Too early to comment fully. The Sandwich Economic Development Task Force (2012) final report to HM Government noted the following achievements:

- Securing of funding for: retraining and up-skilling parts of the Pfizer workforce (ESF), travel (RGF and Network Rail), flood defences (Environment Agency), financial incentive package (RGF).
- Ensuring recognition of Discovery Park as an Enterprise Zone priority for the South East LEP.
- Establishment of an Accelerator Grant scheme for research-intensive companies.
- Retention and creation of over 800 jobs at Discovery Park. Overall, 650 jobs have been retained by Pfizer at Discovery Park. Building on this retained presence, a number of other science businesses have also announced that they will be located at Discovery Park: Mylan, Peakdale, and Unilabs.

Lessons and implications

Able to bring together a response quickly, mobilising funds of local partners and able to attract discretionary support (e.g. through RGF). Some of this funding is supporting life sciences and other technology businesses, and it is intended that Discovery Park will attract a range of users, including high value businesses and jobs.

Relatively depressed context and local reliance on public sector employment provides case in relation to rebalancing agenda.

Response relating to workers has been beyond standard mainstream support. This bespoke support has been funded by Pfizer, which has played a key role in the response.

Response model applied in steelworks closure locally, and will be modified for other situations in the future.

There was a danger that new lab infrastructure would have had to be demolished because of chargeable rates on empty property – this was prevented when site was sold. In the past RDAs tended to buy such sites to prevent loss of key assets.

Case 6: Tata in Scunthorpe

Table 5-6: Tata Steel Blast Furnace Restructure, Scunthorpe

Nature of shock, including timescale	Downsizing of the Scunthorpe steel blast furnace works in May 2012, announced May 2011; reducing volumes by 25% to 3m tonnes per annum. The restructure resulted in the loss of 1,200 jobs (direct) and an additional 500 (indirect).	
Impact on business, people, place	Limited evidence beyond the figures of 1,200 direct job losses and an additional 500 when dependent contractors are accounted for.	
Response functions: rationales and actions	 The Tata Steel Economic Response Task Force was initiated by Vince Cable. The terms were to: mitigate the economic impact of direct job losses by: supporting the workforce and dependent supply chain stimulating growth and investment in the local area enable the Tata plant to maintain competitiveness through restructuring. Under these terms, the explicit aim of the taskforce was 'management not prevention'. 	



The Task Force adopted two core workstreams:

- 'Managing Job Losses' a process that blended the JCP Rapid Response Service with Tata's own workforce support programme (including a one-to-one support provision and brokered outplacing/cross-placing)
- 'Inward Investment' focussed on a £10million RGF bid.

Response forms: structures, processes and partnerships The response took the form of the Tata Steel Economic Response Task Force; a group chaired by the local private sector (John Clugston, of Clugston Group), attended by North Lincolnshire Council, Job Centre Plus, Next Steps, the Skills Funding Agency, BIS, and Tata Steel (including the Tata economic development activity: UK Steel Enterprise).

The Task Force agenda was focussed on coordination of two activities:

- Support provided to directly dependent workforce, a single Delivery Group (incorporating the JCP Raid Response Service) provided:
 - A careers audit of the full 5,000 Tata workforce
 - ➤ Tailored advice, redeployment, and training packages for 1,200
 - Central advice and guidance Resource Centre; providing re-training, financial advice, and self-employment support
 - Jobs-fairs and skills matching in support of outplacing, redeployment, crossplacing.
- Preparation of a £10million RGF bid focussed on inward investment framed by the Humber Offshore Wind vision
 - This money will help create at least 500 new jobs in North Lincolnshire through allocating grants to businesses looking to invest in the area. The programme's key priorities are to create new businesses; support the expansion, modernisation and diversification of existing businesses located in North Lincolnshire and to encourage new companies to locate to the area. Grants are subject to businesses creating sustainable employment that will last a minimum of three years.

Time duration of responses

The activity of the Tata Steel Economic Response Task Force coincided with the May 2011 to May 2012 redundancy programme, with legacy activities, such as coordination of RGF delivery, led by Local Authority and associated stakeholders.

Evidence on the effectiveness of the response

No structured account of impact has been prepared; reflecting the short timeframe since the shock.

Anecdotally, stakeholders report low impact of the shock, because of the actions implemented; Tata met their ambition to make no compulsory redundancies and the majority of the 1,200 were successfully engaged in training, start-up, self-employment, retirement, or redeployment in local economy (including associated engineering sectors represented by Conoco Philips, Total, Siemens, and Able).

In addition, the £10million RGF bid was successful; currently in the early phases of implementation. Alongside inward investment, RGF funds have been employed to support the completion of engineering apprenticeship schemes cut during the Tata restructure.

Finally, Tata have confirmed a commitment to invest £400 million over next five years into the remaining Scunthorpe operation (£80million committed so far).

Lessons and implications

Distinctive features of the response to the Tata restructure at Scunthorpe include:

- The Task Force provided a valuable coordinating centre to the initial response to restructure; enabling an ordered approach to mitigation of job-losses, minimisation of impact on the local economy, and developing a growth programme for the area.
- Because Tata had not invested in skills development of the workforce in the runup to the restructure, it was receptive to a structured workforce appraisal process; the firm being reluctant to lose key skill sets.
- The Task Force benefitted from the endorsement of central Government when seeking to generate the buy-in of local stakeholders. This included the close engagement of the Tata Regional Director; an individual with 'real decision-taking



capability'.

 The dominant factor in the apparent 'low impact' of the Tata restructure appears to be the capacity of the local labour market demand side to absorb the skilled workforce exiting Tata.

Overall, the significant investment made by Tata in the support package directed to the affected workforce, paired with the' economic development and diversification' funding and activity driven through the firm's UK Steel Enterprise activity greatly supported the mitigation of impact in Scunthorpe. This level of commitment reflects the context of restructure rather than withdrawal; Tata would maintain a workforce of c.3,500 in the area.

Private sector engagement in responses

- 5.13 Another interesting example in the current context again comes from the steel sector. Rio Tinto Alcan (RTA) announced the closure of its smelter in Northumberland in November 2011 after a 40-year presence. As the largest private sector employer in the area, this was a significant shock for the county. Some of the response approach followed the pattern set out in relation to the current context, i.e. Jobcentre Plus was involved actively, and this included the use of the Rapid Response Service etc. In addition, RTA has been involved actively, as set out in Table 5-7. This was not just through providing resource to help workers find alternative sources of employment and/or training, but playing a lead role in the formation of the Response Group (chaired by Northumberland County Council), providing a model for taking forward the response (RTA's Regional Economic Development model), and leading the Investment Acceleration task group. As part of this task group, it provided £1m of legacy funding to help deliver response actions. It is worthwhile noting that this case, and indeed the Tata one, were characterised by very effective and open communication processes, with the specific details of redundancy planning being set out openly and transparently, so that other partners understood fully both sequencing and timing issues. Equally importantly, participation in 'response groups' by both firms was at the level of senior decision-makers actively involved in running the businesses concerned, rather than PR executives.
- This scale of the private sector engagement and support is perhaps atypical, though the active role of the employer is not. As noted above, Pfizer and Tata both provided support to workers, and both were involved in the Task Forces. In the case of Tata, it is clear that the emphasis on retraining activities were, in significant part, about retaining for the future its brightest and best talent; retraining had a strong future-facing commercial motive. In other cases, employers have provided support to worker redeployment such as Motorola (Yellow Book, 2002) and AstraZeneca (SQW, 2010), and have contributed to developing the evidence base to diagnose responses and inform site re-use, again in the case of AstraZeneca (SQW, 2010).
- 5.15 It is difficult to be definitive, but the study's view is that sophisticated employers that value a well-regarded brand (in ways which employers 20 or 30 years ago simply did not consider, because of the then largely under-developed importance of corporate responsibility), may feel 'compelled' to be seen to be acting positively and constructively. This is not a call for all future shock responses to be left at the doors solely of employers, but the issue of 'safeguarding' brand reputation and standing may mean more sophisticated firms can be persuaded to be involved more actively in addressing their shock issues than might have been the case previously.



Case 7: Rio Tinto Alcan in Northumberland

Table 5-7: Rio Tinto Alcan Aluminium Smelter, Lynemouth

Nature of	shock,
including	
timescale	

In November 2011, Rio Tinto Alcan (RTA) announced the intended closure of its Aluminium Smelter in Lynemouth; resulting in the loss of 527 direct jobs by December 2012.

Impact on business, people, place

Impact is yet to manifest beyond the direct losses associated with the closure; summarised by the majority of stakeholders in the statement: 'a loss of 527 jobs, and an estimated £60million to the local economy'. As part of its work, the Response Group has projected impact, highlighting the following:

- In addition to the 527 direct job losses, an additional impact through induced and indirect effects were estimated at: 276 jobs lost in Northumberland and a further 384 in the rest of the North East (source: North East Economic Model).
- The closure was expected to lead to estimated GVA losses of £9m in businesses located in Northumberland, and a further £15.9million in businesses located in the rest of the North East (source: North East Economic Model).
- The loss of the Alcan plant affected council spending through the loss of business rates income. The 2012/13 rates liability was nearly £3.5million.
- The closure of the Lynemouth plant was expected to have knock-on effects on a wide range of economic and social indicators. This impact will be concentrated in the area close to the plant, exacerbating the negative impacts deriving from economic conditions more generally. These include falls in household income, negative impacts on health and wellbeing, and increases in financial exclusion, benefit claims and deprivation in general.

Response functions: rationales and actions

The Response Group operated according to formal terms of reference:

"The group has been established to provide a coordinated response to Rio Tinto Alcan (RTA), its employees and supply chain. At the outset, the group will focus on addressing immediate impacts and carrying out short term actions to support the companies' employees and their families".

From this basis, the stated purpose of the Response Group was to:

- co-ordinate lobbying efforts to mitigate effects of closure of the RTA Smelter on the Northumberland economy
- prepare for closure by developing a framework of support for the workforce and supply chain – analyse staffing numbers, skills and future requirements, work with other agencies
- assess supply chain and strategic economic impact including future development opportunities for the area.

Under these terms, the role of the Response Group was to maximise the effectiveness of the component responses of stakeholders through coordination of their delivery. Components include:

- RTA's own redundancy support package (including dedicated outplacement support and advice)
- JCP's Rapid Response Service
- Arch and NCC social and economic regeneration programmes
- RTA's own Regional Economic Development (RED) Programme (a programme deployed at RTA closure locations aimed at contributing to the economic development and diversification of the area affected by closure).

Additionally, the Response Group sought to de-politicise the closure process, in order to maintain a coherent support effort, through engagement of local Councillors, MPs, Unions and Communities.

Response forms: structures, processes and partnerships The response took the form of the Rio Tinto Alcan Response Group.

The Response Group was chaired by Northumberland County Council, and included Rio Tinto Alcan, Jobcentre Plus, Arch, Skills Funding Agency, the Department for Business, Innovation and Skills, North East Chamber of Commerce, and VCS representation. In discharging this role, the Response Group adopted a six-workstream structure: Workforce, Supply Chain, Communications, Investment Acceleration, Strategic Economic



Impact, and Community Impact.

The Response Group format was informed by the Regional Economic Development (RED) Programme; a standardised structure, the 'guiding principles' of which are:

- Engage multiple stakeholders
- Align objectives
- Forge partnerships
- Build upon job-creating, business-led initiatives
- Remain attuned to local context and business realities
- Establish baseline, monitor, and audit

Time duration of responses

RTA Response Group was convened immediately following the announcement by Rio Tinto Alcan of the intention to close in November 2011.

The Response Group operated through 2012; supporting the RTA redundancy support package (i.e. incorporating the JCP Rapid Response Service), coordinating the associated area response, and establishing a monitoring framework.

The Response Group was wound-up in December 2012, with responsibility for on-going programmes passing to key members of the stakeholder group; Northumberland County Council, RTA, JCP and Arch (the Northumberland Development Company).

Evidence on the effectiveness of the response

Too early to comment on long-term outcomes.

In the short-term, achievements associated with the work of the RTA Response Group included (as of December 2012):

- Workforce redeployment: 78% of the 527 individuals made redundant at RTA
 Lynemouth were in new employment, engaged in start-up/self-employed enterprise, in training, or retired.
- Inward investment: The RTA-lead Marketing Group had:
 - Sold the Lynemouth Power Station to RWE Group; forming 'Lynemouth Power Ltd' and securing the associated workforce (120 individuals).
 - Secured the tenancy of Aartoft Ltd at the vacated site; a modular construction operation employing 20 individuals.
- Funds leveraged: Stakeholders had secured a variety of funds orientated towards local economic development, examples include:
 - > RTA Legacy Fund (£1million) enterprise, employability, and regeneration
 - > Big Local Lottery Funding (£1million) community lead regeneration
 - RGF South East Northumberland Business Growth Programme (£11.75million) indigenous enterprise and inward investment
 - Northumberland Local Broadband Plan (£14million) broadband infrastructure.
- Inward investment: The North Eastern LEP Enterprise Zone has been extended to include a portfolio of strategic sites linked to the Port of Blyth.

Lessons and implications

Distinctive features of the response to the RTA closure in Lynemouth include:

- The significant investment made by RTA in the support package directed to the
 affected workforce, paired with the' economic development and diversification'
 funding and activity driven through the firm's Regional Economic Development (RED)
 Programme.
- The emphasis placed on stakeholder engagement and communications by the Response Group; an emphasis seen by many involved, as critical to the effectiveness of support efforts (their coordination and uptake).
- The emphasis placed on data collection and baselining by the Response Group when seeking to develop a tailored support framework able to function over the long-term.
 This is a direct response to the lack of data observed in relation to the comparator closure of Anglesey Aluminium.

Overall, the RTA closure must be viewed within a broader context of deindustrialisation of the North East; presenting the Response Group with a relatively limited labour market demand. In this context, the Response Group's activity was largely framed by a long-established area 'regeneration' agenda.



Responses to disasters and other events

- 5.16 The final set of responses is in relation to disasters and other events. The Cabinet Office provides guidance through its national recovery guidance pages¹¹. This includes topic sheets covering communities, insurance issues, transport, financial impact, financial support and utilities, and case study material on flooding, Foot and Mouth Disease (FMD) and the Buncefield Oil Depot incident.
- 5.17 The Buncefield Oil Depot incident is covered in case 8, in Table 5-8, and summer riots of 2011 in case 9, in Table 5-9. These note a number of important points for learning in relation to responding unexpected events such as disasters:
 - The effects can cut across a number of issues, including infrastructure, business, the workforce, the longer-term regeneration of a business park seriously impacted by the shock, and communities. They can also take place at varying spatial levels. Response forms therefore need to be flexible to take account of the varying issues, with an appropriate model developed. The consultation feedback in relation to Buncefield highlighted that the experience of developing a recovery model from scratch would stand local partners in good stead for any future events, such as flooding. Rather than having a standard model to deploy, they would again review the event in terms of its specific issues.
 - The response to riots was strategically-led at national level, and the joint working across departments was important in putting a response package together. Operational and longer-term responses relating to communities rested with local partners, and indeed there was variation in how to address, manage and disclose such issues between, for example, London and Manchester.
 - Communications are critical in providing businesses, individuals and organisations with up-to-date information on issues affecting them. In doing this, there is a need to be mindful of the differing needs of various groups. In the case of Buncefield, for example, in hindsight businesses and residents should have received separate addresses in the immediate aftermath of the incident.
 - In dealing with business issues, the experience of Buncefield raised some key points. There was a shortage of flexible financial assistance for businesses, which were placed under great stress, with some impacted for a long period. This is particularly important for smaller businesses, which have less capacity and slack to deal with significant issues affecting their operations. The response to riots did provide flexible financial assistance to businesses affected, drawing on the experience of responding to floods over the previous 10 years.
 - In the case of both of these events, which were caused by man-made factors, the parallels to responses to natural disasters, such as flooding, are made quite explicitly. Therefore, it is useful to consider the evidence and responses on natural disasters and other major events together.

¹¹ See: https://update.cabinetoffice.gov.uk/content/national-recovery-guidance-economic-issues-economy-and-business-recovery



Case 8: Buncefield Oil Depot Incident

Table 5-8: Response to the Buncefield Oil Depot Incident in Hertfordshire

Nature of
shock,
including
timescale

An explosion occurred at the Buncefield Oil Depot in Hemel Hempstead on Sunday 11 December 2005, triggering several further explosions and a major conflagration. It was caused by an unconfined vapour cloud that was ignited. The Depot was located on Maylands Business Park, the largest business park in the East of England.

Impact on business, people, place

630 businesses located on the Park were affected, with SQW (2006) identifying 90 of these as being significantly affected. The 540 non-severely affected businesses were disrupted for at least 48 hours following the incident, e.g. unable to access premises etc. Those affected severely were still feeling the impact some four months after the incident at the time of the report. The key impacts on businesses included: increased operating costs; destruction of company assets; failure to meet orders; lack of new orders; short-term cash flow crunches; underinsurance; and forced relocation (17 permanent relocations).

Workers were affected in a number of different ways. SQW (2006) noted 135 permanent layoffs and 92 short-term lay-offs amongst severely affected businesses, and 10 permanent layoffs and 9 short-term lay-offs amongst other businesses. It was anticipated that redundancies might increase in the future. Some workers who did keep their jobs found that they were having to commute further, e.g. 1.5 hours each way daily, or weekly, to Manchester. Residents were affected due to damage to properties and because of shock and fear following the incident.

The future of the Business Park was affected, because of fears that some businesses might not return to the Park and/or because of difficulties in persuading new tenants to come to the Park. There was also the immediate clean-up to address.

SQW (2006) estimated the GVA impact at c. £90-£110million including multiplier effects.

Response functions: rationales and actions

Business and worker support included the following:

- · Jobcentre Plus and Citizens Advice Bureau support to individuals affected
- Buncefield Bus offering advice to those whose employment had been affected
- Advice from local agency on signposting, CV support, career development loans.

Community support covered advice on hardship issues, housing and welfare advice. A Mayor's recovery fund was set up, which provided grants to some of those affected – there was discretion in how this could be used.

The longer-term regeneration of the Park was actually being considered at the time of the incident, so this was considered by the business group (see below), though then became part of mainstream work.

Response forms: structures, processes and partnerships

A Recovery Group was set up to provide strategic leadership of the whole response to the incident, chaired by Herts County Council. Three sub-groups were established covering:

- Infrastructure (chaired by Dacorum Borough Council) leading on utilities, roads, cleanup and repairs etc.
- Business (chaired by Herts Chamber of Commerce and Industry) leading on business support, employee support and impact assessment.
- Community (chaired by Dacorum Borough Council) leading on welfare and housing. All groups were chaired by senior officers, rather than politically led. There was no guidance at the time on recovery structures, and so the model was developed to fit the issues.

Time duration of responses

The overall Recovery Group ceased at the end of March 2006, and the Infrastructure Group at the end of January 2006. Business and Community Groups carried on for much longer, as the issues were longer lasting.

Evidence on the effectiveness of the response

The emergency response was viewed as effective, though communication could have been improved, e.g. on information on access. It was also perceived that there was insufficient support from central government and oil companies for the disaster fund (SQW, 2006).

The business recovery support was not well received. Feedback suggested that the support could have been proactive to contact businesses and encourage them back to the Park, and that there was a lack of appropriate financial support (reduction in rates etc.) (SQW, 2006).

Lessons and implications

A number of key lessons emerged:

• Structures put in place were appropriate – despite not having guidance on this, belief that



- this helped, because they were made to think about the issues and set up what was suitable in the context.
- Small firms tend to be hardest hit as a result of incidents such as this, because they often
 operate from a single site, and have little slack in resource. They may also focus on more
 local markets. (SQW, 2006).
- There is a gap in the financial support available in the aftermath of an event of this scale.
 Government and agencies should consider a flexible financial assistance package.
 (SQW, 2006).
- Residents and businesses need to be liaised with separately, as they have quite different needs (SQW, 2006). More broadly, communication and information is a critical aspect of response to disasters.

Case 9: Social unrest in 2011

Table 5-9: August Riots 2011, England

Nature of shock, including timescale

Extensive damages and loss of business from the high streets of London, Manchester, Birmingham, and Liverpool following five days of civil unrest in August 2011.

Physical damages were relatively short-lived across affected areas; allowing major high streets to rapidly return to 'business as usual'.

However, areas with a history of deprivation and economic decline present a complex set of negative and positive impacts on local economy and community cohesion, which have endured over the longer-term (Independent Panel on Tottenham, 2012).

Impact on business, people, place

A unified account of 'impact' is not available due to the distribution and localisation of riots. Headline statements include:

- The Association of British Insurers valued pay-outs to policyholders at £200million
- The British Retail Consortium estimated that retailers lost at least 30,000 trading hours
- Police estimated 5000 crimes and 4000 arrests attributable to riots during the five day period
- Analysis by the Local Data Company indicated 48,000 local businesses (shops, restaurants, pubs and clubs) had suffered financial losses due to looting and rioting
- Police estimated at least 100 homes were destroyed in the arson and looting

Response functions: rationales and actions

During the period of unrest, the principal response was led by Police and associated Emergency Services; focussing on the return to order.

In the immediate aftermath, Local Authorities received support from Central Government in the form of a three-pronged riots response package. The package is outlined in a letter from the Rt Hon Eric Pickles MP to affected areas (August 2011):

- 1) A £10million recovery fund to help with the immediate costs of making areas safe, clear and clean. This fund could be used, for example, to clear debris and make immediate repairs to pavements and roads. This Recovery scheme could also be used in support of council tax discounts or council tax relief for householders.
- 2) A £20million High Street Support Scheme, funded jointly by Department for Communities and Local Government (CLG) and BIS, which was to be made available immediately, for the streets and areas where businesses were affected by the rioting. The money was intended to help get business trading again and meet short term costs, including to cover business rates hardship relief, support to businesses on cash flow, financing building repairs and encouraging customers back to the affected areas.
- 3) Re-housing funding to meet the immediate costs of emergency accommodation for families who had been made homeless by the disturbances.

A key component, the High Street Support Scheme was engineered by BIS and CLG through provisions of the Industrial Development Act 1982. In this form, the riot response package adopted the format of response to flooding developed in the 2000-10 period.

Overall, the package sought rapid repair and return to 'normal': CLG (Department for Communities and Local Government) reimbursed councils' immediate costs to make their areas safe, clear and clean and to help councils reduce business rates, finance emergency building repairs and encourage customers back to affected areas (The Rt Hon Eric Pickles MP, July 2012).



The riot response package was complemented by the provisions of the Riot Damages Act 1886; in principle, enabling communities affected by riots to claim damages from the relevant police authorities. Uninsured and underinsured parties can be compensated, while insurers can recover compensation paid to riot-affected policyholders from the police.

The Government intervention paralleled the response from the insurance market.

Longer-term responses led by Local Authorities and associated stakeholders, in partnership with Central Government, sought to tackle factors deemed contributory to the civil unrest. Specific interventions included Policing Review, Social Policy Reviews, Troubled Families Initiative, Local Area Regeneration programmes (e.g. Independent Panel on Tottenham), and Gang Violence task-forces. This longer-term response was primarily motivated by prevention of, and resilience to, future events of this nature.

Response forms: structures, processes and partnerships The immediate response package was delivered to residents and businesses by Local Authorities, backed by a commitment by Central Government (principally CLG) to reimburse incurred costs.

This process was mediated by a simple 'claims-form' system established by CLG; providing guidance on eligibility and magnitude of support, albeit with significant scope for Local Authorities to tailor the application of funds to the context.

All support from the package was mediated by Local Authorities; payments linked to the claims submitted and costs incurred. Central Government was not engaged in the direct funding of affected firms or residents.

The riots response package was accompanied by a parallel response by the insurance market; resulting in a variety of coordinating dialogues, specific to affected areas.

Long-term responses present a variety of partnerships combining Local Authorities, businesses, and charity/voluntary organisations in context-specific recovery and regeneration programmes. As set out by Rt Hon Eric Pickles (July 2012):

- There was recognition of the leadership shown by the Mayor of London and local authorities across the country in driving recovery in their areas, helping to galvanise the community and bringing people together to reclaim and rebuild their neighbourhoods. Salford celebrated local pride by launching an 'I love Salford' campaign as an act of defiance against the looters. Manchester made sure people understood what help was on offer by knocking on doors and helping to complete forms. The Mayor of London provided a dedicated website and helpline, supported the charitable High Street Fund, and created a Regeneration Fund.
- Local authorities also provided their own funding or facilitated access to other funding.
 For example, the Croydon Enterprise Loan Fund provided interest free loans up to
 £10,000 to affected businesses and the Tottenham Fund in Haringey raised around
 £50,000 and received donations of clothes and goods for displaced families. Ealing
 started making emergency payments to businesses within a week of the disorder.

Time duration of responses

The riots response package was discharged between August 2011 and the end of 2011. Longer-term recovery and regeneration programmes are on-going, alongside broader prevention and resilience initiatives being led by Central Government.

Evidence on the effectiveness of the response There is limited formal evaluation material on the 'effectiveness' of the response. However, retrospective treatments of the response are available, providing an anecdotal coverage.

The three funding packages were considered by commentators to have sped the return to normal business of affected high streets; providing an essential gap-filling measure capable of faster responses than the insurance industry. Commentators estimated that the riots response package removed 2.5 days from the typical 'return to business' cycle.

However, the lack of apparent conditions accompanying funding was viewed with suspicion by some Local Authorities; this was seen to delay the utilisation of available monies as Authorities sought to clarify implications of use.

Independent from the three riot response package funds, the claim of damages via the Riot Damages Act 1886 was found to be ineffective; a lack of familiarity with the provisions, paired with dated mechanics, inhibiting the effective distribution of compensation. As a result, the Act has been scheduled for review and update.

It is too early to comment on the effectiveness of longer-term responses.

Lessons and implications

Distinctive features of the response to the August 2011 Riots centre on the rapid coordination of 'recovery' funds by Central Government, enabled by the Industrial Development Act 1982,



and distributed by the existing Local Authority structure.

Informed by the response to flooding in the 2000-2010 period, the riots response package represents a short-lived 'immediate' response designed to return affected areas back to 'normal'.

This focus on the 'norm' appears critical to enabling a rapid response; eliminating the uncertainty and delay associated with development of response strategy in the short-term. As such, the fuller 'response' is dependent on a longer-term effort to address the factors contributing to the initial insult through prevention or preparation.

Key points and implications for decision-taking

- 5.18 This chapter has set out the evidence on a range of different types of shocks and their associated impact in a number of different contexts. As highlighted earlier, the material does not intend to be comprehensive. Rather, it provides nine discrete observations across time, place and shock type. As such it seeks to communicate the often unique combination of factors that come together to form the context for a particular shock, re-emphasising the need for responses to be tailored, intelligent, flexible and specific.
- 5.19 Taking the material in the round, there are some key implications to be carried forward to the framework:
 - Responding fully to major shocks in a local economy should be seen as a
 restructuring exercise that will require a long-term generational process. There is a
 large amount of literature on restructuring, which this study has not been able to
 consider, and which the study team encourages BIS and its partners to assemble and
 have-to-hand as shock-thinking goes forward.
 - The structures and processes used to deliver a response (i.e. the response forms) can be important contributory factors in determining effectiveness. This includes such points as capacity to understand a shock, having appropriate partnership working (including resilience, trust, and clear roles and responsibilities), having discretionary resource and flexibilities etc. Some of these issues are covered in more detail in the next chapter. As we saw in the case of response to disasters in particular, the model needs to be flexible around the issues.
 - The active participation of the private sector employer can provide a useful input to shock responses. Indeed, they can be a key instigator of the response, a position that can be leveraged where brand values and reputation are at stake publicly.
 - Previous institutional contexts have provided greater discretionary resource at the disposal of key partners as well as more flexibility in the use of funding. However, in the current context, standard models have been found generally to work effectively, as far as the evidence permits assessment at this early stage. These responses have benefited from some favourable underlying local and/or workforce characteristics however.
- 5.20 Finally, there are specific points to draw on in thinking about shocks and the responses to them, notably through the domains introduced in chapter 1. The approach to the study identified business, people and place as the key domains in considering shocks, with supply chains embedded within the business domain. Based on the evidence it is clear that supply



chains should be considered within its own domain, separately from the direct business(es) affected. This is because the arguments around rationales may well differ significantly (for example, many responses find no case to support the direct business, but do seek to provide some assistance to supply chains). The evidence has indicated that place considerations need to assess a range of related issues including land, property and infrastructure, community aspects and the wider fit into local place strategy and restructuring. So, a four-fold domain model (including supply chains as a distinct domain) can be crystallised as follows:

- Business: this is the direct business(es) involved, whether it be the one potentially closing/rationalising operations or those directly affected by a disaster or other event.
- Supply chains: this relates to the businesses indirectly affected, particularly suppliers to the primary business.
- Workforce and skills (rather than people): this specifically relates to those workers within business and supply chains.
- Place and communities: communities are incorporated here to reflect the potential effect on people and communities where there is a shock concentrated in a local area, or an event affecting not just those in an 'economic' domain. Issues here may relate to social capital, retaining community cohesion and hardship issues. This is a subset of the broader place dimension. This may be narrowly focussed (e.g. on sites, premises etc.) or more broadly considered as part of local economic restructuring, which would need to consider support to business, skills, infrastructure etc. in the wider local economic context.
- 5.21 The next chapter draws the evidence on learning together, from the perspective of processes for responding to shocks and the specific actions that have been found to work.



Synthesising what works and learning

6.1 This penultimate chapter synthesises the messages from the previous analysis of shocks to identify the key determinants and considerations in responding to shocks, success factors in previous responses, and specific learning points. As such, it lays the ground for the framework that is set out in the following and closing chapter.

Caveats on the robustness of evidence

- 6.2 It was not within the scope of the study to provide a detailed critique of the robustness of the evidence in individual studies. Nevertheless, having been through the literature and consultation process, the following observations can be made on the robustness of the evidence in the round:
 - There is a significant amount of evidence on the *process* of how responses have been implemented. A significant number of learning points that are illustrated in this chapter therefore relate to process issues. Some of these issues appear to have been pertinent in delivering responses effectively, and the issues become of greater concern under the circumstances of shocks than they might do under 'normal' economic development interventions. In setting out the important process issues, the study has sought to identify common points between different responses to shocks, in particular focussing on those where there is also evidence to support effectiveness.
 - The evidence available on the effectiveness of interventions, in terms of delivering outcomes, is often based on assessments of positive trends (e.g. percentage of workers gaining employment). A number of studies include treatments of counterfactuals, though when undertaken, these are normally done so through self-reported additionality, as opposed to adopting 'strong' designs that may include comparison (or control) groups of non-beneficiaries. There are some studies, particularly of relevant programme interventions such as Selective Financial Assistance (see Harris and Trainor, 2007), where the evaluation design has included comparison groups of non-beneficiaries, with the econometric models and methods used to identify the impact of the assistance variable. This said, in general some care is needed to avoid being overly disparaging of past evaluation approaches, given that shocks by definition have to be responded to quickly, with little immediate thought given to evaluation design. Ruling out such evaluation material, much now running back 20+ years, also loses sight of the fact that quality of action and calibre of process can be necessary (though not sufficient) determinants of impact.
 - Going forward, it may be useful to explore some experiences in responding to shocks in a new light, in particular if administrative datasets, such as those held by DWP (Department for Work and Pensions), can be used. In addition, it may be prudent to consider how more robust evaluation design can be incorporated in assessing future action responses to shocks. We turn to this in chapter 7.



• A final point to note is that longer-term place-based responses are often multifaceted, with multiple outcomes and multiple possible causes of outcomes. As indicated in the Magenta Book (HM Treasury, 2011), in these instances evaluation design that uses comparison or control groups is likely to be inappropriate, with theory-based approaches more suitable.

Appropriate mixes of response interventions

- Quite clearly, the mix of interventions needs to flow logically from the issues of the shock. Where possible, and where multiple domains are affected, it is important to have a package of actions that address all of the issues, i.e. covering business, supply chains, workforce and skills, and place and communities. In the case of MG Rover, supply chain modernisation and diversification was provided along with support to workers. In addition, the wider place-based response was integrated into overall economic and planning strategies for the locality/region (e.g. spatial corridors approach). Arguably, the communities and local capacity building side may have been a missing piece of the jigsaw (Hall, 2012). In the case of VSEL in Barrow-in-Furness, whilst local economic diversification was addressed, the issue of a large redundant workforce was less of a priority, in part reflecting the state of economic development thinking at that time.
- As part of the appropriate mix of interventions, it is also important to target support for business at areas most directly affected by the shock, whether geographically or sectorally. In the case of Mitsubishi in Adelaide, support was given to businesses in other parts of the region, and it was not clear that this was cost effective or relevant for restructuring and dealing with the shock issues (Beer *et al.*, 2008). Therefore, a clear *underlying logic* from issues to actions will be important in ensuring the delivery of outcomes and effectiveness in dealing with the shock.
- 6.5 The time dimension of response interventions is also important here. There may be a requirement for short-term responses to certain issues, and indeed to be seen to be doing something', which starts to galvanise efforts, and long-term responses to other issues. The partitioning of the short-term issue of workers from the long-term regeneration of place (as part of wider economic restructuring) was a critical feature in the effective response to the closure of shipyards in Gothenburg (Cadell, 2008). Taking the long-term view was also a key feature found in the case studies reviewed by SQW and BBP (2001). In determining the future of affected sites, it may be prudent to exert some patience over tenants if this might yield higher value uses and jobs. This was recommended in the options assessment of AstraZeneca's former site at Charnwood (SQW, 2010). This might require close working with site owners/developers, and in some cases agencies may be in the hands of owner/developer decision-making. This time dimension therefore presents an important process consideration in how responses are delivered.
- In taking a long-term view, a further process consideration is the stability in institutions, which can be important in sticking to the vision (as in the case of long-term regeneration in Gothenburg (Cadell, 2008)). This has been a feature of international contexts, rather than institutions in the UK (Pringle *et al.*, 2011), though local authorities could take some responsibility for ensuring the continuation of strategic vision.



6.7 This need to bring together often complicated mixes of response solutions, and to understand the reinforcement/interference effects that can sometimes result represents a major challenge for some of the LEPs. There is variation across the LEPs, and whilst some have strong capabilities and the capacity to consider and implement sophisticated mixed response solutions, in other cases this is untested. In particular, the focused private-led approach can target efforts on the single-issue solutions, rather than integrating responses across the various economic domains. Ensuring that all LEPs, going forward, have the ability to understand the interplay and complexities of effective and appropriate interventions, based on a thorough and robust understanding of the data, is an important challenge. The LEP capacity fund may help in this regard; and further commitment in the response to the Heseltine Review, setting out capacity building including support from BIS Local, CLG and Whitehall sponsors, may do so as well (HM Treasury and BIS, 2013).

The importance of good intelligence

- 6.8 Good quality data and the act of turning this into intelligence can contribute greatly to responses to shocks. Three key ways are evident.
- Observing trends and spotting potential future shocks can mean mitigating actions can be put in place, or the closure can even be prevented. This is easier said than done, and is more conducive in sectors where data can be more easily collected on trends, e.g. in sectors such as manufacturing. The saving of GM at Ellesmere Port and the retention of Ford at Halewood (now operated by Jaguar Land Rover) are good examples of where on-going trends in the sector were observed, and close working relationships were developed between the business and public sector business development actors.
- In the case of 'slow burn' run-downs, actions to slow the process down can often enable the supply chain to diversify (with support) and workers to be redeployed within the sector (even in a declining one) through 'replacement demand' as other workers leave and retire. This enables workers to continue to retain and use skill sets and to maintain income levels (Bailey *et al.*, 2012). In the MG Rover case, a diversification and modernisation effort over 2000-2005 'saved' as many as 10,000 supply chain jobs, and the continued operation of the plant during this time enabled 9,000 workers to leave the firm ahead of the final collapse (Bailey *et al.*, 2012). The supply chain impacts of the closure were thus considerably ameliorated by the time MG Rover eventually collapsed. Advance warning and intelligence via monitoring is thus critical in developing responses.
- 6.11 The RDAs were well placed to do this, as are the larger and more sophisticated city region local authorities, but LEPs may not be ideal vehicles for this role given that private firms in difficulty may not be willing to share sensitive information with other firms (given that LEPs are business led). Larger local authorities can still play this role, but in other cases there is a question mark over who has the capacity to undertake such intelligence gathering. Partnerships between local authorities could be appropriate. Before RDAs, local authorities cooperated to develop intelligence around industrial restructuring and likely impacts. One example was the 'Motor Industry Local Authority Network' (MILAN) (see Davenport *et al.*, 1990). This shared intelligence so as to understand likely trends and the impacts of restructuring and closures. Such local authority cooperation could be one way of improving the intelligence base going forward.



- 6.12 Data and intelligence gathering can inform the diagnosis of a shock, thus informing what to do, and how best to target support. Again, advance warning can enable the mapping of supply chain firms and workers so the spatial scale of the shock can be understood, and hence an immediate response can be launched on closure (as in the case of LDV). In the absence of intelligence gathered in advance, putting in place capacity to seek data and insight from relevant employers and agencies quickly is a useful and important first action of a response group or task force. For example, RTA's response model includes a specific strategic data work group, which commissioned work to identify the potential effects of the closure (see study conducted by Braidford *et al.*, 2012). The closure of AstraZeneca at Charnwood prompted a study to examine potential destinations of workers, facilitated by data provided by AstraZeneca itself, and options for site use (see SQW, 2010).
- 6.13 **Sound intelligence and insight is also important in developing longer-term strategies that are appropriate to the conditions of an area**. In doing this, consideration should be given to what might contribute to longer-term resilience, such as diversification in sectors, synergies across sectors, the importance of exports, and the roles of human capital, civic capital, and internal and external networks (see e.g. Hill *et al.*, 2011, Wolfe, 2010, and European Commission, 2012)¹². SQW and BBP (2001) noted that, whilst it is important to have a clear initial vision and set of actions, it is also advised to revisit strategies over time. In the case of Gothenburg, it took at least two failed attempts before an appropriate regeneration strategy was developed (Cadell, 2008).
- Again, these observations have implications for the LEP model. Whilst some of the LEPs have their own capacity (or capacity within local authorities) to understand and diagnose effectively their local economies, there is variation across other LEPs. Ensuring that all LEPs are able increasingly to diagnose the performance of their local economies (in reality complicated economic systems in their own right), and can come forward with appropriately sophisticated responses, is a key issue, as recognised by Heseltine (2012). The capacity fund for LEPs, and potential further measures that may be implemented once the practical implications of Heseltine's recommendations are worked through, may help in this regard.

Significance and influence-ability of the issues

- 6.15 The significance of the scale of potential effect, and the ability to influence the issues are important drivers of whether a response is viable and likely to have the desired effect.
- 6.16 In considering the significance of a particular closure, aside from size, three key issues may prompt grounds for intervention:
 - Alignment of the sector/technology of the business with national industrial priorities: this highlights the need for national industrial policy, and so Cable (2012) provides the clearest picture on this, highlighting advanced manufacturing (in particular aerospace, automotive and life sciences), knowledge-intensive services (in particular creative industries and professional business services) and supporting sectors such as digital, information economy, construction and energy. Clearly, this

 $^{^{12}}$ Note that this raises an interesting debate between approaches based around diversification, and those around clustering and agglomeration. Whilst clustering/agglomeration may lead to increased concentration, it could be argued that clustering and diversification need not be conflicting, in particular if clustering involved exploring synergies between relatively diverse areas (e.g. the use of ICTs in the automotive sector), or diversification of markets within sector/clusters of focus.



is a long list, and could conceivably cover a large number of businesses. Therefore, alignment with national priorities would need to be focused on those activities critical to these sectors, and where it would be difficult for the capacity/capability to be recreated.

- Importance in terms of national security: there may be significant grounds if there is a national security issue, e.g. in terms of the provision of an important resource such as energy, or contribution to health care.
- Disaster recovery: a response to a disaster, whether natural or man-made, may also be viewed as significant thereby prompting urgent need for government response.
- 6.17 In terms of influence-ability, three examples are instructive on the nature of the key aspects here:
 - For example, the scale of effect resulting from the rundown of VSEL in Barrow-in-Furness was massive, both relatively and absolutely, but the context of a peripheral location with an undiversified economy and a low skills base greatly constrained the scope for economic restructuring. Therefore the two issues of significance and influence-ability are often not natural bedfellows, especially in the context of economic restructuring.
 - In the recent case of Pfizer at Sandwich, there were immediate assets, and so opportunities, that could be capitalised on. In particular, the former Pfizer site offered a range of accommodation and facilities that could be attractive to technology-based firms (from a range of areas) and other occupiers.
 - In terms of preventing closures, the case of GM at Ellesmere Port had some key features: there was sufficient forewarning and the decision had yet to be made; the plant itself was competitive, though the cost per car produced needed to be reduced substantially; and there were opportunities to highlight the strengths of the plant that may have been previously overlooked. Therefore, by highlighting strengths of the plant to GM's senior management, making concessions to reduce costs, and identifying what else government could do to support (e.g. through skills, supply chains and R&D), the decision here could be influenced.

Having the right structures, processes and people

6.18 Where actors have a good track record of collaborative working then oversight may be lighter touch than in cases where this type of response is new to them; for example, the response to the LDV closure brought together the same actors who had worked together on MG Rover. A division of tasks was agreed to avoid duplication, and responsibilities and accountabilities were clear 'from the off'. Strategic oversight in the case of MG Rover was provided by AWM, which was seen as useful in enabling different actors to find solutions to problems and to vie for funding where necessary. There may be a trade-off between having a more effective, focused task force response involving actors delivering interventions, and a more inclusive approach which may bring other actors to the table but which may complicate communication. In determining roles and responsibilities of partners, the subsidiarity of action leads is an important issue to address. In many cases, responsibilities



are likely to be clear. When shock responses are more complex, e.g. through national or cross-national structures, it is important that decisions are taken at the appropriate spatial level; ensuring subsidiarity, which draws on place–specific knowledge and understanding (not just data) should be a key consideration. An illustrative learning point from the response to the fuel strikes was that local partners should have been taking operational decisions, for example on which side of a particular road should fuel stations have been refuelled in West Cumbria.

- 6.19 Different types of Task Force model can be outlined such as employer-based task forces, sector-based task forces and varying area-based task forces (e.g. local, regional and national). Such task forces can bring together a range of actors to address shock situations. Some task forces can be seen as reactive and regenerative, operating over short time-scales, whereas others may be more proactive and developmental operating over longer time frames (Pike, 2002), with evolution between these modes as the scale and challenge of some shocks or potential shocks unfold. Area-based task forces may be seen as more likely to try to address longer-term economic restructuring needs. Task Forces can in turn be assessed in terms of the degree of multi-level working, the degree of devolved responsibility, to what extent a tailored policy response is developed, and also legitimacy (and on the latter communication of task force interventions may be key) (Bentley et al, 2010). Henderson and Shutt (2004) suggest that the Yorkshire Forward-led Task Force that was established in relation to the closure of the Selby coalfield in 2002 was effective, because it avoided the mistakes of the past. Instead of being overly bureaucratic, it was focussed and strategic, and anticipated the likely pitfalls. It was also focussed on the issues by being locally-led.
- 6.20 Individual membership of structures and processes has been raised in the research, with the leaders and chairs of structures recognised for having the ability to persuade, encourage and negotiate in order to make things happen. It has also been observed that members of Task Force models are normally most appropriately executives rather than being party political representatives; this avoids politicising responses and compromising evidence-based objectivity.
- 6.21 As can be seen in relation to RTA in Northumberland, but also in other examples, private sector engagement in structures and processes can be an important addition. Employers will have specific knowledge of their workers, supply chains and local economic issues that make them key partners in responses. Those that have been embedded within an area for a long period may also have a desire to leave a legacy following their departure or rationalisation. The development of 'brand' as a feature of firms' public external persona provides leverage here.
- 6.22 Communication is an important supporting task for shock responses. In the case of disaster recovery, this is critical in keeping those affected up-to-date with developments (SQW, 2006). In providing support, communication with workers and businesses is vital so they know what support is available to them. Initial signposting for workers could have been better in the first few months after the MG Rover closure. In contrast, signposting for business support in the case of the WM Regional Task Force was seen as positive (Berkeley *et al.*, 2011).



6.23 The evidence from this report suggests that task forces need to have strong leadership, a clear statement of objectives (that can change over time), clear responsibilities and lines of reporting, and include relevant parties that can focus on the issues.

Having the right resource and capacity

- 6.24 Three key features have been commonly identified in terms of resource and capacity:
 - Being 'fleet of foot' in response so that actions can be put in place quickly, even if with limited resource. For example, £1m pump-priming support was provided to Barrow-in-Furness by the then DTI-North West, and Kent County Council set up an initial business support fund for loans and grants to new businesses in the aftermath of Pfizer (Sandwich Economic Development Task Force, 2012). In both cases, prompt modest resources enabled action to start quickly, and to be seen to be starting quickly, which was important in process terms. Consideration of 'rapid response' funding, perhaps encompassing exceptional RGF and deployed with real flexibility may be a useful component of the single funding pot recommended by Heseltine (Heseltine, 2012), and accepted by government (HM Treasury and BIS, 2013).
 - An important feature of the 'regional model' was that RDAs had discretionary resource that could be deployed. Henderson and Shutt (2004) noted that Yorkshire Forward could use its own Single Pot resource to provide funding quickly to support Selby as part of the response to the closure of the Selby coalfield; this was in addition to funding that was sought from national sources. As well as providing resource quickly, a key process attribute, the Single Programme increased the scale of resource, thereby potentially improving the effectiveness of the response.
 - Bending rules provided relaxation of eligibility criteria to support workers. For example, there was the suspension of the '16 hour' rule in the MG Rover case to enable workers undergoing training to receive benefits, or for statutory qualifications to be supported on a temporary basis given the scale of the shock. This relaxation of rules was a relatively cost-less action, but could contribute to the effectiveness of the response with respect to workers.
- In addition, institutional memory and learning is seen as critical in developing a 'permanent capacity' to deal with shocks and to 'hit the ground running'. For example, the Transition Loan Fund was reactivated under the WM Regional Task Force, drawing on MG Rover experience, and the LSC/JCP response in the LDV case again drew on MG Rover experience. Similarly, local authorities which had years of experience in dealing with deindustrialisation and restructuring had a better toolkit of actions to deal with the 2008-9 recession than local authorities which had been dealing more with the pressures and challenges of economic growth (Bailey and Chapain, 2011).

Cross-nation responses

6.26 As part of the study, we have tested the prospects of cross-nation responses on shocks. No examples were cited by consultees or through the literature review process of when cross-nation responses had been implemented. Having said that, there was an openness from the



Devolved Administrations consulted to consider joint approaches where this might make sense, for example in relation to:

- shocks that cut across a national boundary, e.g. if supply chains and/or the travel to work geography crosses two nations
- multi-plant shocks from the same employer/sector that are in two or more nations
- emergency recovery where a strategic level response is appropriate at a crossnational level.
- 6.27 It is important to stress that the last two examples could be part of a two-tier model. The evidence from the cases reviewed in this study suggests that certain responses, e.g. relating to people and place, are best considered and delivered at a local level. In such cases, an overarching cross-national model may be appropriate in sharing practice, and in gaining scale benefits through joint gathering of data and intelligence.
- 6.28 The evidence also indicates that some care is needed in the case of cross-nation responses, because of the differing institutional contexts. For example, in the context of the response to the recession it was commented that different incentives could be deployed in Wales (e.g. employment subsidies) compared with the neighbouring region in the south west of England. This can influence the allocation of resources, in this case human capital, and cause displacement issues. Such aspects would need to be overcome if cross-nation responses were to be implemented. More generally, it is worthwhile reflecting that, going forward, national political divergence may mean there is significantly greater variety in the stances taken in responding to shocks.

Other lessons

6.29 Lessons on what works are summarised in Table 6-1, drawing on specific examples. This is supplemented by a longer list of examples and further detail in Annex D. Many of the examples cited incorporate evidence on the effectiveness of the response actions.

Table 6-1: What works and learning from past responses/interventions

Domain	Intervention/ response	Commentary on what worked/learning
Business	Support package to influence decision-taking	In the case of General Motors' decision to stay at Ellesmere Port, government was able to draw on a package of interventions around the business and its supply chains (e.g. Grant for Business Investment, AMSCI (Advanced Manufacturing Supply Chain Initiative), RGF) and its workforce (e.g. National Apprenticeship Service). This was also facilitated by workforce concessions to help improve plant efficiency.
Business	Selective Financial Assistance	Harris and Trainor (2007) found that receipt of Selective Financial Assistance (SFA) by manufacturing firms in Northern Ireland reduced the probability of plant closure by 15%-24%.
		The results showed that the overall net effect on employment change was an increase of around 19,600 jobs in plants that had received SFA compared with a loss of 33,200 jobs in eligible but non-assisted plants.
Business	Support following disasters	Learning from disaster response (e.g. Buncefield Oil Depot incident and floods), businesses require two key things: information and communication, including details of when they can access their



Domain	Intervention/ response	Commentary on what worked/learning
		premises and proactive measures to encourage businesses and people back to an area in the aftermath of a disaster; significant financial assistance through a flexible scheme and relief on rates (SQW, 2006).
Business & supply chains	Business support	Albeit based mainly on self-reported benefits, RDA evaluation evidence found that the largest benefits (relative to costs) were in the area of business support (PricewaterhouseCoopers, 2009).
Supply chains	Support to modernise and diversify	Mitigating actions were successful in helping suppliers to Rover to diversify between the Rover Task Force in 2000 and the MG Rover Task Force in 2005, and then thereafter (ECOTEC, 2008). This was a tailored support package.
People	Combining employer-led redundancy support with Jobcentre Plus and Rapid Response Service	The quick and coordinated response following the closure of RTA in Northumberland meant that 78% of redundant workers were in new employment, engaged in start-up/self-employed enterprise, in training, or retired within several months of closure. The sustainability of outcomes was unknown at the time of the work.
People	Retraining	A key part of the response to MG Rover's closure was having:
		 discretionary support so that workers could take part in retraining for alternative careers
		 flexibilities that could be used to bend rules (e.g. retaining benefits even though workers were in short-term full-time training).
		90% of ex-MG Rover workers were in employment three years after the closure and 60% had undertaken some form of retraining/education (Bailey <i>et al.</i> , 2012).
People	Coordinated model	The response to the closure of the shipyards in Gothenburg was coordinated, led by Unions, and also involving public authorities, the local Labour Market Board and other local employers. Shipyards were merged and closed sequentially to help coordinate the response, early retirement was used for older workers and a combination of retraining and actions finding alternative employment in other employers meant that unemployment never increased above 4% in Gothenburg (Cadell, 2008). Communication plans for staggered redundancies have been used in other countries such as Spain (European Commission, 2010). These examples require cooperative approach and a more interventionist model.
People	Coordination and 'flexicurity'	The coordination between employers, employees and public authorities has been identified as key in Finland in providing financial security to redundant workers in between jobs (European Commission, 2008). This incentivises partners to help secure positive destinations for workers quickly. In Austria, outplacement services are jointly-funded by employers, surviving workers and redundant workers (European Commission, 2010) – this requires a strong public employment service and a cooperative ethos and culture.
People	Employer pools and coordination	In various countries in Europe, employer pools are used to identify opportunities in other employers locally – e.g. in Sweden and Germany (European Commission, 2010)
Place	Enterprise Zones	Previous initiatives around Enterprise Zones (e.g. in the 1980s) have been found to have had limited net benefits, because of high displacement effects and short-lived benefits (Sissons and Brown, 2011). They did, nevertheless, provide short-term benefits (Sissons and Brown, 2011), which may be important in delivering quick wins



Domain	Intervention/ response	Commentary on what worked/learning
		in the aftermath of a shock.
Place	Long-term restructuring	Pringle et al. (2011) identify a number of issues in supporting place-based growth, including having long-term stability in institutions, developing new areas of growth in related activities, and the importance of strong research centres and human capital that reinforces development. This emphasises holistic place-based responses over a long period of time that take advantage of local strengths. E.g. in Germany (in the Ruhr and Munich for example), there have been targeted investments in strategic transport, and assets such as science parks and educational establishments alongside other support.
Place	Long-term restructuring	In Gothenburg, long-term response to closure of the shipyards has taken 25+ years. It has combined investment in educational establishments, with development of relate cluster around information technologies where synergies have been found to other sectors, e.g. automotive. The process benefited from long-term stability in institutions, and a private sector ethos of borrowing at commercial rates to fund regeneration (Cadell, 2008).
Place	Investing in technology assets	In the West Midlands, longer-term transformation of the economy was implemented through regional strategy and regional programmes around clusters and High Technology Corridors. The High Technology Corridors programme was seen as effective in developing technology assets and was combined with specialist support to businesses, e.g. through proof of concept funding and innovation networks (SQW, 2008).
Place	Developing sites	The future development of sites and premises requires some coordination between public authorities and private developers/ owners. In some cases, developers may 'sit on' sites, hoping values will increase. A desirable outcome is for sites/premises to be used appropriately in the context of local economic strengths, which may require taking a long-term view and may mean seeking higher value uses. For example, the current approach at Discovery Park (formerly Pfizer) seems to combine technology uses with other employment creation that may be appropriate to the local labour market.

Source: SQW, drawing on a range of sources

6.30 This chapter has sought to synthesise the learning from the literature and case material covered by the study, including through providing specific evidence on examples of actions that have been used in the past. Informed by this, the next chapter introduces and sets out the proposed framework.



Setting out the framework

7.1 This final chapter introduces the framework and sets out the recommendations for its implementation. It is difficult to be prescriptive on instructions and decision-taking, given that the situation, causes and issues relating to individual shocks will vary. Nevertheless, specific observations are made, using different possible scenarios and shock typologies, as well as reporting other points that have been raised by the research.

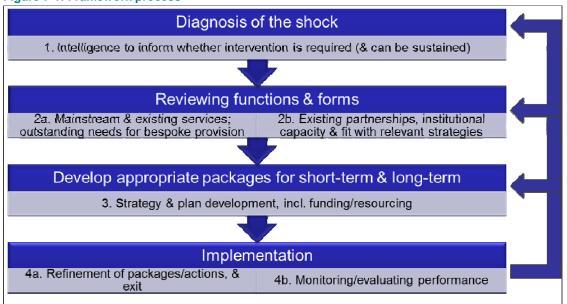
Overall framework process

- 7.2 In chapter 4, theoretical frameworks that have been developed elsewhere were considered to understand:
 - the origins and processes of shocks (Pike, 2005; Hill *et al.*, 2011)
 - the process that Local Authorities could use in responding to the recession (Chapain *et al.*, 2011)
 - different types of interventions that could be deployed at different points of a shock (European Commission, 2010; Wolfe, 2010; Hassink, 2005).
- 7.3 Drawing on this material, and the wider set of case material reviewed in the study, we have developed a simple four-stage framework process. This is set out in Figure 7-1It is recommended that decision-takers use this framework as a process to inform their thinking in advance, during and in the aftermath of a shock. Whilst all parts will not necessarily be relevant, the stages, and the detailed components that are provided later in this chapter, will provide an informed structure to decision-taking. Drawing on Pike's (2005) notion of the different 'moments' of a shock, it is recommended that decision-takers use the process in an iterative, cyclical and thought-provoking way. For example: revisiting the initial diagnosis will be necessary as the situation changes; it may be appropriate to consider, and attempt, intervention at the level of the direct business first, before reviewing other interventions; and in implementation, an appropriate monitoring and review process will be necessary, which may result in changing actions.
- 7.4 Figure 7-1, with the following stages, which are described in more detail in the rest of this chapter:
 - 1. Diagnosis of the shock: gathering intelligence by drawing on existing and new data relating to the shock, to inform thinking on whether interventions are needed at the level of the direct business(es), supply chain, people, and place and communities.
 - 2. Reviewing appropriate response functions and forms:
 - 2a. functions consider what mainstream services ought to be signposted to in order to address relevant needs identified under Stage 1, whether other existing initiatives could be leveraged, and then whether there are still unmet needs that could be addressed through bespoke provision



- 2b. forms consider existing partnership arrangements and joint agencyworking, the spatial level of the issues, the nature of issues in play, and whether there is an existing strategic framework within which the response might sit.
- 3. Development of appropriate packages for the short-term and long-term: recognising the purposes and imperatives of the timelines for action, and based on the previous stages, planning (and, if appropriate, strategy development) is progressed.
- 4. Implementation of actions whilst outside of the scope of a decision-taking framework, there are two further considerations here running alongside implementation:
 - ➤ 4a. refinement of packages/actions and knowing when to exit formally from public sector response
 - ▶ 4b. on-going monitoring and evaluation of performance.
- 7.5 It is recommended that decision-takers use this framework as a process to inform their thinking in advance, during and in the aftermath of a shock. Whilst all parts will not necessarily be relevant, the stages, and the detailed components that are provided later in this chapter, will provide an informed structure to decision-taking. Drawing on Pike's (2005) notion of the different 'moments' of a shock, it is recommended that decision-takers use the process in an iterative, cyclical and thought–provoking way. For example: revisiting the initial diagnosis will be necessary as the situation changes; it may be appropriate to consider, and attempt, intervention at the level of the direct business first, before reviewing other interventions; and in implementation, an appropriate monitoring and review process will be necessary, which may result in changing actions.

Figure 7-1: Framework process



Source: SQW and Coventry University Business School, drawing on Pike (2005) and Chapain et al (2011)



1. Diagnosis of the shock

- 7.6 Figure 7-2 sets out the key issues for consideration in diagnosing the shock. This is split into four domains, comprising **Business** (direct business/businesses affected by the shock), **Supply Chains, Workforce and Skills**, and **Place and Communities**. For each of these domains, there is a series of questions/issues for consideration, the data types and sources that will be required, and implications/interpretational comments. The purpose of this stage of the framework process is to:
 - Determine whether or not there is (or there might be) a case for intervention in any or all of the four domains: at this point, it need not be "yes" or "no" to intervention, as it may be dependent on other issues considered at other points in the framework process. In addition, there may be a case for intervention, though it may not be any more than mainstream services, which results from consideration of the second stage of the framework process.
 - Identify the critical issues and potential needs for each of the four domains: for example, in the case of Workforce and Skills, this may identify a specific groups within the workforce or issues such as qualification accreditation and finding alternative careers options; in the case of Business, this may identify critical issues facing businesses in the aftermath of a disaster such as accessing and securing premises, finding alternative short-term premises or dealing with cash flow.
 - Identify the market and other failure arguments that might provide a case for public sector intervention: this will need to consider the strength of case and the types of issues that might prevent the market functioning efficiently itself, or might mean that the market provides an undesirable outcome (e.g. in equity terms). As per HM Treasury Green Book logic, the initial starting point should be that government does not intervene, assuming that markets will function in their own rights.
- 7.7 The guidance on interpretation highlights where judgements may need to be taken on whether issues merit a 'high', 'medium' or 'low' rating of concern or impact. This will need to be taken on a case-by-case basis. The case study fiches presented in chapter 5 provide some benchmarks that might be considered, though caution is emphasised in using these as strict indicators. For example, the concentration of employment that was affected following the rundown of VSEL in Barrow-in-Furness was around one-third, a figure that is unlikely to be repeated again, whereas more recent closures have tended to represent concentrations of around 2% of the functional local economic geography at the highest.
- 7.8 Given this, the output from the first stage of the framework process should be an assessment and diagnosis of the shock, and in particular:
 - gathering of data and intelligence to answer as many of the key issues/ considerations as possible
 - judgement, drawing on the evidence, as to whether there is a possible case (or not) for intervention in each of the four domains, and the reasons for this
 - key issues that may need to be addressed through intervention.



- 7.9 Illustrative depictions are provided in qualitative terms in discussion of Stage 3 of the framework process, set out below.
- 7.10 At this stage, it should be noted that the process of using the framework to inform decision-taking need not be a simple linear one. Reappraising Pike (2005), there are different 'moments' in a shock process. So, if there is a case for intervening at the level of the business, then this avenue of response ought to be considered first. This may involve considering issues relating to workers, supply chains, and land and premises, but in the light of how they are perceived by the business. Once the avenue of influencing a business's decision has been pursued, then it may be appropriate to consider diagnosis more fully if the business has not altered its closure/rationalisation decision.



Figure 7-2: Stage 1. Diagnosis of the shock - intelligence to inform diagnosis

	Type of evidence			
Question/issue	required	Source	Implications/interpretation	
 Diagnosing the business(es)/factory(ies)/plant(s): What are the causes of the shock and what do these suggest for the wider supply chain and skills of those affected? Is there a rationale for supporting the business(es) directly, e.g. due national significance or security, or as part of a disaster response? Market/other failure rationales may be stated in terms of: Disaster response: information failures e.g. associated with unavailability of insurance, equity issues, Saving businesses that are relevant to national security: externality arguments and institutional failures (that may have brought about closure). Saving businesses of strategic sector importance: can be a case of information failures (i.e. if parent company is unaware of benefits/resources available if located in UK or performance of particular factory), externality arguments in terms of effects on wider sector (and its skills, capability and asset base), equity issues currently or in the future if people will lose their jobs (depending on location). 				
Causes of closure/rationalisation, including exploration of technological and market pressures/opportunities facing the business and its sector (both present and trend)	exploration of technological and market pressures/opportunities facing the business metrics backed up by business metrics consultation with senior manager; and use of extent to which the business may be able to turn things around. E.g. if a short-term blip, then may be a case for intervening, long.			
Disaster response and recovery requirement, in particular diagnosing recovery needs to be based on issues arising from immediate response	Descriptive	Local authorities (and their agency partners), business community, other government departments	Nature of disaster, and recovery issues flowing from this; national/localised aspects of the issues affecting the types of actions and structures for response. <i>E.g. how far issues can be overcome and nature of these.</i>	
National security issues, e.g. providing energy or other commodity or service	Yes/no, with indication of scale of security issue if "yes" and description	National policy documents and national sector teams	Extent to which business is of national significance and so stronger case for intervention, e.g. high, medium, low, none	
Other strategic importance, e.g. specific skills/sector alignment with industrial policy/technology strategy; or important supplier of services/products	Yes/no, with indication of degree of importance if "yes" and description	National policy documents and national sector teams	Extent to which business of national significance and so stronger case for intervention, e.g. high, medium, low, none If it is an important supplier of services/products, could this be met in other ways through the market, e.g. yes – definitely, yes – probably, no. If "no", this could strengthen the case for intervention at the level of the direct business; if "yes – probably", there may be a case for intervening with the direct business and/or by looking at alternative sources.	



Question/issue	Type of evidence required	Source	Implications/interpretation
Time gestation of shock, i.e. is there forewarning, is it a slow burn, is it an 'overnight surprise', will the shock be time-limited (e.g. due to disaster or strike), and duration of the afterlife of shock impacts	Descriptive	Business, partners. Accessing past evaluation evidence of appropriate shock/ regeneration activity	Extent to which responses may already be in train Extent to which mitigating actions can be implemented to prevent or reduce the scale of a shock for which there is forewarning Extent to which responses are needed to tide business(es) over in the event of strike or disaster. Likely duration of time commitment required to address the implications of the shock? How quickly can responsibility for addressing the implications of the shock and long-term be transferred? E.g. answering "yes" to points above might indicate a case for being able to influence final outcomes in business survival terms

Businesses in Supply Chain (defined geography): How critical is the shock to supply chains? What wider business opportunities are there for supply chains, and what might be required to take advantage of these? Is there a rationale for government support relating to these? Are there short-term issues facing businesses that may merit government intervention? Market/other failure rationales may be stated in terms of:

- Helping viable businesses in times of distress: this could be related to path dependency or lock-in to particular businesses, sectors, markets, or crucially technologies
- Closing information gaps: e.g. in terms of knowledge of new products and/or new markets /technologies that may be viable, but not accessible due to transactional issues or lack of information.
- Arguments presented to justify government business support programme: e.g. businesses are not aware of the benefits of investing in their own development or do not know
 where to access appropriate support; uncertainty in benefits from investing in R&D; asymmetries between businesses and external finance providers; difficulties in obtaining
 finance in risk-averse finance markets.

How significant are local supply chains of the business closing/under threat from closure?	Quant. estimates of purchases from local businesses and nature of these purchases (i.e. are they sector-specific or generic services)	Business	Whether or not supply chain issues are relevant in the context of the shock. <i>E.g. highly localised supply chain, moderate, low, none.</i>
Reliance on 1st tier business (e.g. % of turnover)	Quant. estimates of numbers and %s	Survey	Provide indication of <i>high, medium, low</i> effect to 2nd/3rd tier businesses locally
Productivity/performance measures	Quant. estimates	Survey (with some evidence of benchmark if available)	Provide indication of relative health of supply chain businesses, i.e. might they be viable long-term businesses, <i>high, medium, low</i>
Strategic importance of the businesses in the supply chains, e.g. in terms of sector, skills, technologies	Descriptive	National policy documents and national sector teams	Extent to which businesses of national significance, e.g. high, medium, low, none
Technological changes, market pressures and opportunities facing the businesses	Descriptive	Commentary based on secondary evidence + survey (e.g. Market and Technology Foresight, sector analyses, inputs from Technology	Provide indication of the need for businesses to respond to technological change, and the alternative markets and competitive positions of businesses in these markets - informs types of intervention, and case for intervention (e.g. if firms are unable to access certain markets for particular reasons, such as information



Question/issue	Type of evidence required	Source	Implications/interpretation
		Strategy Board and perhaps the Catapults)	or sector or local-specific barriers to entry)
Have supply chain businesses had any forewarning of the shock, e.g. is it a closure over a longer period, and have businesses reacted in their own strategies (e.g. diversification)	Descriptive responses and proportion of businesses responding favourably	Survey/consultation with supply chain businesses	Provide indication on whether mitigating actions have already been implemented by businesses themselves; intervention may still be required, but it may be lighter touch and/or short-term

Workforce and Skills: What is the scale in terms of the number of people affected? What specific and generic skills do they possess? What is the scope for people affected to find employment in the local area? Will it be the same type of employment? What barriers exist to finding alternative employment? What rationale is there for government intervention? Market/other failure rationales may be stated in terms of:

- Filling information gaps and addressing coordination issues: e.g. acting as broker between those seeking employment and those trying to fill vacancies; this might also include providing individuals with the ability to signal their skills (e.g. through accredited qualifications, top-up training to overcome information asymmetries and address licences to practise or other regulations, improving the accessibility and communicability of CVs or job-seekers in interview situations),
- Externalities: there are positive externalities associated with training.
- Equity issues: the case for intervening may be particularly highlighted when the economy concerned is peripheral, isolated part narrowly-based
- Institutional issues: workers have not been able to collect redundancy payments (e.g. because closing businesses have not been able to pay); workers are ineligible for training, or only eligible with some penalties; current provision cannot be capacity following a shock; risk of one part of the benefits system undermining the activities of other parts (e.g. as was case in past regarding incapacity and unemployment benefit coordination failures)

Scale of jobs affected in: 1st tier business(es); contractors; supply chains	Absolute numbers , and % of local employment base	Business' HR & Purchasing depts; survey of supply chain businesses	Indication of direct and indirect scale of shock, e.g. high, medium, low
Geography of workers affected - where they live, spend, and extent of mobility	Quantitative on residential locations, and local spending. Descriptive on mobility, based on evidence of (intended) relocations, recognising transport infrastructures	Business HR dept, Unions, survey of supply chain businesses Relevant past research e.g. retail capacity studies	Indication of travel to work areas/employment centres, e.g. high, medium, low levels of concentration; high, medium, low levels of mobility Improves efficiency of labour market if workers are more mobile, reducing need for intervention; though may result in out-migration which may increase case for place-based intervention
Nature of workers' skills	Descriptive, ideally with %/numbers estimated against qualifications, skill levels and skill types	Business HR dept, Unions, survey of supply chain businesses	Indication of high to low skills, nature of skills (e.g. service, technical etc.), transferability of skills (high to low), mothball-ability of skills if forecast to be relevant in the future (high to low) - informing finding of alternative employment and occupational mobility. Specific skills that cannot be easily transferred may suggest particular issues and failures to address (e.g. filling information gaps associated with needing to signal to employers about skills possessed or a requirement for top-up training.



Question/issue	Type of evidence required	Source	Implications/interpretation
Nature of workers' occupations	Descriptive, ideally with %/numbers estimated for different occupational classes	Business HR dept, Unions, survey of supply chain businesses	Indication of <i>high to low</i> classes of occupations, nature/content occupation skills (e.g. managerial, sales, process plant operatives etc.), transferability of occupations skills (<i>high to low</i>) etc.
Amount of forewarning employees have had, and extent to which they have been able to make future decisions (e.g. employment, new businesses, re-training, retirement etc.) - and any mitigating actions such as employability, training	Descriptive	Business - HR dept, Unions	E.g. high, medium, low time of forewarning More forewarning reduces 'shock' to employees and potential impact of the closure.
Wider evidence on nature of people affected	Descriptive, ideally with %/numbers estimated against characteristics (e.g. age, gender), and data on pay, duration of employment, culture of employment	Business HR dept, Unions, estimates from survey of supply chain businesses Accessing past evaluation evidence of appropriate shock/regeneration activity	Indication of wider characteristics to inform diagnosis of needs, e.g. older workforce may suggest early retirement actions, long duration of employment and culture of single employer/job for life may prompt need for more intervention
Local labour market issues, e.g. whether relevant jobs for workers available locally and scale in terms of numbers of employers recruiting and numbers of opportunities, whether these opportunities represent unfilled vacancies	Descriptive with some quantitative data, e.g. on employment forecasts by sector	Local authorities, Local Enterprise Partnerships (forecasts may need to be purchased)	Consider likely job opportunities in line with nature of workers - any mismatch may mean need to intervene to promote alternative career options and/or to provide training, qualification accreditation, work experience etc. This would suggest some information gaps on the part of workers around the potential opportunities available to them. Also need to be aware of potential substitution/ displacement effects relating to existing unemployed workforce

Place and Communities: What is the competitiveness of the local economy? What wider opportunities and threats exist, including to community aspects? Is there a rationale for intervention? Market/other failure rationales may be stated in terms of:

- Equity/distributional arguments underpinning rationales to support particular places; related to this there may be path-dependency of areas suffering from industrial decline.
- For specific issues around sites, there may be uncertainty(e.g. Iran contamination) that can be overcome through gap funding, remediation of land (for which there may be negative externalities relating to nearby land/premises) and infrastructure provision (for which there may be public goods arguments). Planning remains a key risk at the level of particular sites
- Coordination issues: e.g. between site owners and planners/economic development professionals, to ensure opportunities are maximised and aligned with strategic intent
- More holistic place-based responses would need to justify different actions.

Land and property assets	Descriptive with numbers	Business, surveyor/property	Scale of shock on property (high to low), informing rationale for
	(e.g. size of plants etc.),	expertise	support to find alternative uses; also may indicate whether any
	and extent to which could	·	effect on local property markets (high to low)
	be put to alternative use;		Issues, e.g. with contamination, difficulty in finding new uses, may
	nature of contamination of		indicate a rationale to intervene on the basis of uncertainty or
	sites		externalities



Question/issue	Type of evidence required	Source	Implications/interpretation
% of jobs in local area affected (including dimension by private sector jobs) - need to take account of potential upsides of shocks, such as new businesses created by workers, potential that workers losing their jobs may fill previously unfilled vacancies in local economy	Quant. Estimates - workplace-based and residence-based measures where possible (history and future trend)	Drawing on info above alongside ONS sources Formal economic assessment (policy-off) for both GVA and employment	Informing relative scale/concentration of shock (high to low) in terms of local population affected High concentration may indicate rationales in terms of equity issues.
Location quotient of activity affected	Local employment in the sector - LQ (expressed in terms of employment, and value added if available) to region, national concentration in the sector	ONS sources	Informing relative scale/concentration of shock (high to low) and degree of potential path-dependency
Other job creation recent, current and forecast	Quant. Estimates; descriptive based on approaches made by other businesses locally that are recruiting	ONS sources Formal econometric forecasts for both GVA and employment if available Local business feedback on vacancies, recruitment intentions etc.	Context of local dynamics, whether growing, nature of growing sectors etc. May inform judgement on scope for self-healing within the place. Lack of job creation may indicate equity issues are present, or path-dependency.
Economic resilience and SWOT of local area	Descriptive analysis	LEP strategic plan & underpinning evidence base. Historic assessment of GVA/employment growth (ONS sources)	Wider issues to be alert to, and opportunities that could be taken advantage of, e.g. opportunities/assets to take advantage of may increase the scope of intervention to influence outcomes
Any wider effects to note, e.g. loss of local consumer spend, effect on housing markets - again needs to take account of the fact that some workers will find alternative employment and so this mitigates the effects through consumer spend	Descriptive & quant. analysis	Analysis, based on relevant data (e.g. recent retail capacity studies, housing market assessments etc.)	May evidence place-related equity issues, e.g. high loss of consumer spend may heighten equity arguments
Wider effects on community, e.g. psychological aspects of job loss, family/household financing, possible inter-generation effects	Descriptive	Local Authorities, voluntary and community sector representatives	Provides evidence of any wider community impact that may require addressing; judge scale of impact high to low overall and on specific issues



2a. Reviewing possible actions (response functions)

- 7.11 The first part of the second stage logically flows out of the diagnosis, again adopting the four domains by considering what actions might be appropriate **IF a possible case for intervention has been identified in Stage 1**. So, if there is no case for intervening at the level of the business, then there is no need to consider possible interventions, but if there is a case, then possible actions interventions should be looked at.
- 7.12 For each of the four domains there are three aspects to review in looking at potential actions:
 - what mainstream services already exist that businesses or individuals could be signposted to, and/or that places/communities could benefit from
 - what existing initiatives and services can be leveraged and/or deployed in response to the shock
 - what additional bespoke actions might be required to cover any needs that remain unmet by mainstream or existing services, and how self-standing might these be into the future.
- 7.13 In Figure 7-3 a menu of actions is set out under the four domains, and categorised according to 'signposting', 'existing initiatives/services' and 'bespoke actions'. Two examples illustrate the kind of process that may be used to inform decision-taking:
 - Example A shock affecting local sector-specific supply chains where there are international opportunities if competitiveness can be improved: there may be a case for intervening with respect to supply chains according to the diagnosis in Stage 1. Signposting to HMRC for Time to Pay is viewed as relevant, and leveraging existing initiatives is viewed as important, e.g. promoting Manufacturing Advisory Service (to help increase competitiveness of suppliers) and UKTI support for exporting (to contribute to finding new markets). Beyond these, there is no further case for bespoke initiatives as it is considered that existing schemes can meet the needs and issues identified in Stage 1.
 - Example B shock affecting several hundred workers who are highly skilled, but have limited accredited qualifications, there are opportunities in related sectors if skills can be accredited and some top-up training can be undertaken: there is no support from the employer closing its factory, but signposting to Jobcentre Plus is relevant. Signposting to Colleges for training via the Adult Skills Budget is relevant for some workers without Level 2 qualifications. It may be too late for the Rapid Response Service, as the business has already closed. Given the nature of the workforce and their needs and opportunities, other bespoke support actions are relevant, namely top-up training, qualification accreditation and coordination with other employers recruiting in related sectors.
- 7.14 In Figure 7-3 a number of key points are highlighted, picking up on the consideration that will need to be given to the risks, costs, potential benefits and duration associated with actions. This provides decision-takers with prompts that can inform assessment of



deliverability and value for money when identifying appropriate interventions. The references to evidence also indicate where actions may have worked in the past. Whilst most of these references are to studies that have incorporated assessments of additionality and net benefits, many of these are reliant on methodologies that have used self-assessments of benefits (e.g. by beneficiaries), rather than the use of comparison or control groups (note that there are exceptions to this, where beneficiaries have been compared to non-beneficiaries).

7.15 Drawing on this consideration, the output of Stage 2a should be a list of relevant and potentially relevant actions for shock response, covering each of the four domains. This is not the final list of actions to be taken forward, but an initial shortlist for: (i) identifying immediate priorities for signposting and discussing the use of existing initiatives, especially where a shock requires very quick actions to be implemented; (ii) putting together a package in Stage 3. This shortlist should include a headline assessment of likely scale of risks, costs and benefits (and/or issues to be alert to) along with likely action duration.



Figure 7-3: Stage2a reviewing possible actions - menu of response functions

Aspect of action	Action list	Consideration of potential risks, costs, benefits, action duration	Evidence of good practice
Business			
Signposting	HMRC support, e.g. Time to Pay schemes	Risks and costs: low, given existing scheme and nature of relief provided. Benefits: can be high relative to inputs if the measure can help to solve cash flow issues, and so assist in survival – though short-term fix only. Duration: short-term.	No specific good practice evidence identified.
Existing initiatives/ services	 Coordinated Infrastructure provision Skills funding for workforce development Exceptional RGF or Grant for Business Investment Specialist business support, e.g. MAS, AMSCI, Smart grants, UKTI support on exporting, access to finance schemes 	Risks: low risk given existing delivery/provision; risks may be in relying on signposting to provision which does not meet specific needs. Also need to be alert to possible displacement effects of supporting businesses that operate in markets where high levels of competition nationally/ sub-nationally (depending on geography of interest). Costs: no set-up costs given existing schemes, so costs are unit costs of marginal take-up, which, in gross terms, may be estimated at around £11k-13k for MAS (DTZ, 2007, p54) or £5k-15k for business assistance depending on the intensity of support (SQW, 2009, p76). Grants, e.g. through exceptional RGF, likely to cost significantly more. Benefits: net benefits of business support interventions can be high relative to costs, e.g. £100-120k per intervention in the case of MAS, compared to intervention costs of under £15k (DTZ, 2007, p59); and achieved GVA: cost ratio of 7:1 (PricewaterhouseCoopers, 2009, p. ix). Benefits of GBI (and more commonly now exceptional RGF) may be dependent on individual businesses – and scale of deadweight; on assumption that grants might be critical to retaining the business, the benefits could be high. Duration: likely to be over short- to-medium term.	The pre-emptive work by English Partnerships, Liverpool City Council, and the Speke-Garston Partnership to bring forward a Supplier Park at Ford's Halewood plant in the 1990s is a good example of how existing actors can act with imagination through their assisting powers. The package of support offered in the case of GM at Ellesmere Port was considered to be instrumental in persuading GM to keep the factory open. Importantly, this drew entirely on existing programmes to support/potentially support the business and supply chains (National Apprenticeship Service, AMSCI, R&D grants, exceptional RGF), and working with Unions and workers to make concessions. This reduced risk, and ensured costs were constrained to being within departmental budgets (i.e. no new money provided).
Bespoke actions	 State ownership Government loan, e.g. through Insolvency Service Emergency loan/grant fund 	Risks: potentially high risk, in particular if state ownership of a struggling business is required; due diligence can help to mitigate. Costs: potentially high, especially in short-term, and if costs cannot be recouped (e.g. due to bad debts, falling or inappropriate valuation of businesses taken into state ownership); will expect to recoup some inputs later, which can reduce overall cost to being much lower (e.g. through loan repayments, re-privatising business). Benefits: could be high if saves the business, jobs and strategically	No specific evidence on good practice reviewed on this type of action. Past responses have sought to manage risk and costs through due diligence and restricting loan offers to encourage businesses to find other private sector cash (e.g. case of LDV).



Aspect of action	Action list	Consideration of potential risks, costs, benefits, action duration	Evidence of good practice
		important output (e.g. sector, resources such as energy, healthcare, finance etc.); risk of low benefits if business cannot be ultimately saved.	
		Duration : could be short- to long-term (and potentially can require longer-term action than originally intended).	
Supply chains			
Signposting	HMRC support, e.g. Time to Pay schemes	Risks and costs: low, given existing scheme and nature of relief provided. Benefits: can be high relative to inputs if the measure can help to solve cash flow issues, and so assist in survival – though short-term	No specific good practice evidence identified.
		fix only. Duration : short-term.	
Existing initiatives/ services	 Skills funding for workforce development Exceptional RGF or Grant for Business Investment Specialist business support, e.g. MAS, AMSCI, Smart grants, UKTI support on exporting, access to finance schemes 	Risks: low risk given existing delivery/provision; risks may be in relying on signposting to provision which does not meet specific needs. Also need to be alert to possible displacement effects of supporting businesses that operate in markets where competition is likely to be locally/ regionally/nationally based (depending on geography of interest). Costs: no set-up costs given existing schemes, so costs are unit costs of marginal take-up, which, in gross terms, may be estimated at: around £11k-13k for MAS and higher for more intensive interventions (DTZ, 2007, p54); or £5k-15k for business assistance depending on the intensity of support (SQW, 2009, p76). Grants, e.g. through exceptional RGF, likely to cost significantly more. Benefits: net benefits of business support interventions can be high relative to costs, e.g. £100-120k per intervention in the case of MAS, compared to intervention costs of under £15k (DTZ, 2007, p59); and achieved GVA: cost ratio of 7:1 (PricewaterhouseCoopers, 2009, p. ix). Duration: likely to be over short- to-medium term.	There is evidence that carefully targeted grant assistance can prevent closure and help to safeguard jobs. Harris and Trainor (2007) found that receipt of SFA by manufacturing firms in Northern Ireland reduced the probability of plant closure by 15%-24%. The overall net effect on employment change was an increase of around 19,600 jobs in plants that had received SFA compared with a loss of 33,200 jobs in eligible but non-assisted plants. Authors commented that SFA seemed to have worked better with firms that had objectives to survive/retain workers and to expand (rather than new business creation).
Bespoke actions	 State ownership Government loan, e.g. through Insolvency Service Emergency loan/grant fund Specialist diversification support 	Risks: potentially high risk, in particular if state ownership of a struggling business is required, and also risk of not recouping inputs on bad debts; due diligence can help to mitigate; support actions may be lower risk. Costs: lower for support actions, and potentially higher for loans, grants and state ownership (especially in short-term, though will expect to recoup some inputs later).	The limited extent of closures in the supply chain following the closure of MG Rover has been linked to the diversification support in operation since 2000 (when BMW sold Rover), including the Diversification Fund and the Mustard financing project. Both of these were



Aspect of action	Action list	Consideration of potential risks, costs, benefits, action duration	Evidence of good practice
		Benefits: could be high if saves businesses and jobs and strategically important outputs (e.g. sector, resources such as energy, healthcare, finance etc.); risk of low benefits if businesses cannot be ultimately saved. Duration: support actions short-term; other actions could be short-to long-term (and potentially can require longer-term action than originally intended); noted that some businesses (and individuals) can still require emergency relief in the aftermath of a disaster a couple of years after the event.	extended by AWM following the closure of MG Rover. (ECOTEC, 2007). This was associated with intervening early (before ultimate closure), being able to target effectively (i.e. knowing who the businesses were), and the possible opportunities for the future.
Workforce and ski	lis		
Signposting	 Support provided by employer losing jobs Jobcentre Plus mainstream support Training provision through Adult Skills Budget and ESF Redundancy Payments Service Business support for those interested in starting new businesses 	Risks: low risk given existing delivery/provision; risks may be in relying on signposting to provision which doesn't meet specific needs, and in addressing information/communication issues at a time when people are in 'shock' (e.g. post MG Rover, despite providing information packs, people did not always take the information on board). Costs: additional costs are low given that these actions are mainstream and/or through existing budgets/provision; obviously extra take-up of schemes does incur some costs though. Benefits: may be limited overall, in particular if mainstream support does not meet needs of workforce; though in some cases support through mainstream/existing provision is what is required, so levels of benefits may be appropriate to needs; need to be aware of potential adverse effects, such as displacement effects in labour markets. Duration: likely to be short-term.	Case examples of Pfizer, Tata and RTA in chapter 5 indicated positive feedback on scale of achievement in terms of finding alternative destinations for workers – this included a mixed set of responses, including mainstream provision and support provided by employers themselves. Net effect and attribution to these different services is not available. Yellow Book (2002) highlight the success of employer-provided support for workers that Motorola funded in advance and following its closure in Scotland. Need to note the adverse effects, though as the release of workers had a significant negative impact on the people who were already unemployed and seeking work – hence risks of displacement.
Existing initiatives/ services	 Rapid Response Service to supplement Jobcentre Plus support Talent Retention Scheme to assist in job brokerage 	Risks: low risk given existing schemes that we understand from consultation feedback have been seen to work. Risk is in whether they can meet specific needs and in ensuring appropriate coordination to deliver. Need to be aware of issues in working with direct business involved in a shock (e.g. permission to come on site at appropriate times in the case of Rapid Response Service). Costs: low, given absence of set up costs (as they are existing schemes); we understand Talent Retention Scheme is now self-financing.	Case examples of Tata and RTA in chapter 5 indicated positive feedback on scale of achievement in terms of finding alternative destinations for workers – this included a mixed set of responses, including the Rapid Response Service. Net effect and attribution to Rapid Response Service is not available.



Aspect of action	Action list	Consideration of potential risks, costs, benefits, action duration	Evidence of good practice
		Benefits: not reviewed specific evaluation evidence on these schemes, but recent case studies indicate that Rapid Response Service may have contributed to short-term achievement of positive destinations for individuals; need to be aware of potential adverse effects, such as displacement effects in labour markets. Duration: short-term action.	
Bespoke actions	 Promoting alternative career options, such as job fairs, taster sessions, work experience, secondments Qualification accreditation to increase employability based on existing skills Top-up training to bolster existing skills, or enable transfer to related sectors Temporary contracts to help to mothball/retain strategically valuable skills Flexibilities in eligibility criteria, e.g. on benefits/training Coordination with local/national employers recruiting Employment/wage subsidies 	Risks: range of issues to consider here, including establishing new initiatives where these are required, coordinating with providers, understanding future skills and qualifications requirements for employers and sectors, and issues around displacement and substitution in the context of local labour markets. Need to be clear that additional actions are needed, for example Dawley et al. (2012) found, in the case of Northern Rock, relatively low take-up and low attribution amongst workers in terms of how far support had assisted them – this included mainstream provision and more bespoke actions. Some actions come with added risks, e.g. mothballing skills, and need to assess the likelihood of the skills being required in the future. Costs: unit costs of support likely to be low, e.g. £2k-10k per gross assist (SQW, 2009, p76). However, need to be alert to scale of take-up in considering overall costs. Benefits: evidence from RDA 'people' interventions less conclusive on benefits relative to costs than under 'business', with GVA: cost ratio of 2.5:1 (PricewaterhouseCoopers, 2009, p. ix); in estimating potential net benefits, need to be aware of potential adverse effects, such as displacement effects in labour markets. Duration: short-term action; can also be a mitigating action in advance of a shock; mothballing skills may be medium-term action (would be difficult and potentially costly to make this work in longer-term given erosion of skills and expertise).	The response to MG Rover combined a number of bespoke actions, including qualification accreditation, flexibilities in eligibility criteria, job fairs etc. The majority of workers found work after closure, with 90% in some form of employment by 2008 (Bailey et al., 2008). The post-closure Wage Replacement Subsidy secured 1,329 jobs in the supply chain, though ECOTEC (2007) comment that it is unclear how far these were secured in the long-term.
Place and commu	nities		
Signposting	Debt relief provided by existing agencies such as Citizens Advice Bureau Business support for those interested in starting new businesses Local regeneration/	Risks: low risk in delivery given existing provision; might be risks associated with communication of what is/is not available, in particular in the aftermath of a shock or disaster. Noted that communication was vital following Buncefield Oil Depot incident, though at first this was lacking (SQW, 2006). Costs: relatively low, given existing services; need to acknowledge potential funding/resource constraints for some providers working at	No specific good practice evidence identified.



Aspect of action	Action list	Consideration of potential risks, costs, benefits, action duration	Evidence of good practice
	community actions	community level, in particular if there are sharp increases in demand. Benefits: no specific evidence on these in terms of quantifying benefits; some evidence indicating that in the case of former closures, signposting to business support to help with start-up was viewed as useful to starting a business. Duration: likely to be short-term, though experience of Buncefield Oil Depot incident, and other events (e.g. riots, floods) suggests that some individuals may still be using relief measures a couple of years after the event.	
Existing initiatives/ services	Local business rate or tax relief (possibly through Enterprise Zone model) Inward investment through UKTI	Risks: significant risks in terms of displacement effects need to be managed – relates to both an Enterprise Zone model and inward investment. Therefore, careful design is required, e.g. focus on going with grain of strengths and longer-term sustainable investors, and consider carefully the spatial size and focus of Enterprise Zones (or other rate/tax relief measures). Costs: varies, depending on the action and the timescale, though could be high; public sector cost of 22 Enterprise Zones in the 1980s was estimated to be £1.2bn in 2010/11 prices 13. Benefits: evidence on regional inward investment interventions indicate high levels of benefits compared to costs, e.g. achieved GVA: cost of 13.5:1 (PricewaterhouseCoopers, 2009). Evidence on Enterprise Zones indicates that net benefits can vary, because of possible displacement effects (Sissons and Brown, 2011), and so careful design is required. Duration: can range in duration; Enterprise Zones may be longlasting.	Need to be careful on when and where Enterprise Zones are most likely to work. If they encourage relocations (e.g. in the retail sector), then the net benefit is likely to be low. Therefore, larger Enterprise Zones that do not include areas that compete with surrounding geographies are more likely to minimise displacement (and so maximise the net benefits). In addition, combining Enterprise Zones with wider activities, such as skills, infrastructure and innovation may also contribute to longer-term benefits (Sissons and Brown, 2011).
Bespoke actions	 Business/job creation, e.g. through loan funds/grant schemes Site remediation Infrastructure investment, either to increase attractiveness of sites, or to improve accessibility of 	Risks: risks likely to vary for actions here, with these being lower for more 'standard' schemes that can be easily set up and delivered (e.g. business support schemes), and higher for physical schemes where there may be levels of uncertainty (e.g. around contamination) and risk (e.g. in terms of take-up, use and occupation of new facilities). Can seek to mitigate this through process, e.g. careful strategy and action plan development, strong partner buy-in and leadership, aligning different actions as part of a more holistic approach.	The physical regeneration of the area of former shipyards in Gothenburg is an example of good practice in terms of physical infrastructure. Strategy development was undertaken in advance (though it was the 3 rd attempt that was carried forward), appropriate governance was established, and funding included borrowing on commercial terms – all

¹³ See paper by Tyler P., available at http://www.landecon.cam.ac.uk/staff/publications/ptyler/EZs-Making%20Enterprise%20Zones%20Work2nd%20Dec.pdf [Accessed 21/03/2013].



Aspect of action	Action list	Consideration of potential risks, costs, benefits, action duration	Evidence of good practice
	 people to opportunities Property development, including gap funding or use of planning powers to incentivise development Upgrading/developing new technology assets Local strategy development, e.g. economic strategy, Regional Innovation Strategy Changes in area's 'designation' (e.g. Assisted Area, Enterprise Zone) etc. 	Costs: can be high, especially in relation to infrastructure, site and property development and investing in technology assets; these costs can be reduced if government support is for gap funding to sufficiently lower the risk for a private sector investor. Support schemes through loans and grants may be of lower absolute cost, in particular if loan schemes are set up to 'recycle' funds. Strategy development is low cost, but the implementation can be high cost. Benefits: evidence from regional interventions indicated that the benefits of physical regeneration relative to costs can vary. Those under "bringing land back into use" had higher achieved GVA: cost ratios of 5.1:1 than those relating to "public realm" or "image". Science and technology infrastructure investments had achieved GVA: cost ratios of 3.4:1, though this increased significantly if forecast benefits were taken into account. As noted elsewhere in this report, business support interventions had the highest ratios of achieved GVA: cost of 7.3:1. (PricewaterhouseCoopers, 2009). Duration: actions likely to be longer-term in duration and benefits; loans/grant schemes for business/job creation more short-term.	reducing risk and the long-term cost. The development was gradual over time, and built on developing strengths so that skills, business/cluster development was aligned with the physical regeneration itself (Cadell, 2008).



2b. Reviewing structures, partnerships and process (response forms)

- 7.16 In Stage 2b, there are four broad issues to consider which ought to be used to develop appropriate response forms. These are set out in Figure 7-4, showing the four broad issues, the implications and decisions to be taken, and examples of what has worked in the past. Note that there is a need to consider what is emerging from Stage 2a as part of Stage 2b.
- 7.17 The output of this stage is to develop an appropriate *draft* form for response in terms of:
 - who needs to be involved (organisations and individuals), e.g.:
 - overarching perspectives: direct business(es) involved, local authorities, LEPs, BIS Local, other government departments
 - business and supply chains: if appropriate, HMRC, MAS, relevant sector organisations, relevant BIS and other departmental programmes
 - workforce and skills: direct business's HR/employment agency, Jobcentre Plus, SFA, unions, other local/sectoral employers (from recruitment perspective), Talent Retention Scheme, National Apprenticeship Service
 - place and communities: in addition to those already cited may include voluntary and community sector, land/property specialists/agents, prospective buyers of land/property.
 - model/groups to be used, i.e. partnership arrangements, and model structures (including national/local lead, and any subsidiarity arrangements)
 - appropriate strategic framework within which to locate the response, or perhaps whether a longer-term strategy should be an output of the response.
- 7.18 The response form may then be moderated following Stage 3.

Figure 7-4: Stage 2b reviewing structures, partnerships, and process - developing appropriate response forms

Issue	Implications/decisions	Examples of what has worked
Existing institutions, partnership arrangements/ coordination between agencies	Identify the key agencies that need to be involved, including private sector – note that this should also take account of actions/organisations identified in Stage 2a Consider what arrangements can be built on Identify the most appropriate individual(a) who can	RTA instigation and involvement in the response to the closure of its smelter in Northumberland Jobcentre Plus and Learning and Skills Council joint working capitalised on in responses in the West Midlands following joint working after MG Rover closure Birmingham City Council chairing response to LDV closure given its existing close working and intelligence gathering in the years up to closure
	lead/chair a response, ideally from a non-politicised role	DTI–North West, local authority, and English Partnerships coming together to formulate Furness Enterprise in Barrow
Spatial level of the issues	Identify the most appropriate level that the response should be led from, e.g. national, local, cross-nation (in some cases this could be a	Response to the recession involved national oversight group, but below the national level, responses were devolved to regions to lead in their own geographies Conversely, response to the fuel strikes in the



Issue	Implications/decisions	Examples of what has worked
	combination, e.g. a cross- national oversight group, and two or more relevant local task forces) Response to closures in local economies are normally most appropriately led locally, unless there is a national case (e.g. sectoral/industrial priority or appropriate lead by BIS Sector Team, issue of national security); response to other events, such as disasters, may be locally-led or with strategic oversight nationally. Subsidiarity helps ensure decision-making works with the existing grain of places, rather than parachuting-in inappropriate solutions.	2000s were led too much nationally, when more devolution of operational decisions should have been taken regionally/locally. Resulted in perverse decisions, which were not always appropriate locally Many business closures are specific to local areas/regions (e.g. VSEL, MG Rover, Pfizer) and it is appropriate for a locally-led response with national input (to enable resources and ensure visibility). For issues of potentially strategic importance (e.g. energy security) a national group is appropriate (e.g. consideration of any energy security issues following administration of Coryton Oil Refinery's operator)
Nature of the issues: economic, social, community, infrastructure	Given the issues, what are the implications for groups/model, e.g. should there be more than one group/task force to lead on the distinctive issues Note that this needs to take some lead from Stage 2a in terms of the likely actions that will take place as part of the response	Disaster recovery and response often have a range of issues in play, and so several groups may be required to cover particular issues, e.g. response to Buncefield Oil Depot incident had an Oversight Group and separate task groups for Infrastructure, Business and Community Response to RTA closure in Northumberland involved 6 different groups that were issue and task drive: Workforce, Supply Chains, Investment Acceleration (based around 'Place'), Communications, Strategy & data, Community
Existing strategic framework within which a response might sit	Vision/objectives/actions already in train, alignment with issues/possible response Should a strategy be developed for the area?	Response to Pfizer closure in Kent resulted in development of a <i>Growth Strategy</i> Task Force following Selby coalfield closure reappraised strategy and actions relevant for Selby within context of the regional economic strategy The wider response to MG Rover closure was set within wider regional strategic framework that involved regional programmes on Clusters and High Technology Corridors - therefore wider place response became part of the relevant High Technology Corridors

3. Developing appropriate packages

- 7.19 Stage 3 of the framework process involves developing appropriate packages of response actions. Several different techniques may be required here, in particular:
 - testing strategic fit, so as to ensure that the response action works, as appropriate, with the grain of existing economic development intent (challenging this, of course, where necessary)
 - options assessment to consider the pros, cons, possible costs and benefits and risk associated with different actions; key to this is to review critically past evaluation learning (recognising both the qualitative and quantitative aspects of such research)



- discussion with key agencies delivering relevant services about capacity and capability to deliver at higher scale and/or around eligibility criteria
- identification of possible funding sources to deliver actions, including within partners, private sector, national and European sources and discussion about scope to relax any eligibility criteria or other constraints on funding
- planning to set out all relevant actions, lead parties taking responsibility for actions and reporting arrangements.

Scenarios

7.20 To provide an indication of the process for developing packages, five broad types of shock scenario have been defined. These are presented in Figure 7-5. For each scenario, the figure sets out where there may be a case for intervention, and what actions may be appropriate based on what has been done in the past). The examples provided are illustrative, and should therefore be used with caution – in responding to any particular shock, it is important to consider the specific contextual issues in shaping an appropriate response, as was identified in the previous chapter.

Cost-benefit decision-taking

- 7.21 In appraising options for action, it may be appropriate to consider the marginal costs and benefits of supporting additional workers, beyond mainstream provision and standard initiatives (e.g. Rapid Response Service), thereby assessing likely value for money in intervening. This would need to take account of:
 - Anticipated costs/benefits of doing nothing e.g. costs to the Exchequer of benefits payments. A formal review of this has not been within the scope of this study, but the evidence from the longer term cases indicates that some allowance may need to be given to lifelong benefits claimants (e.g. following the rundown of VSEL in Barrow-in-Furness) and inter-generational effects (e.g. following closure of coal mines).
 - Anticipated costs/benefits of intervention e.g. the costs of support against the benefits of Exchequer costs saved, taking into account that the attribution of employment gains may not last indefinitely. For example, DWP (2007) suggests that it is not atypical for the benefits of employment support to be counted for 2-3 years. The costs of support will be dependent on the actions taken, and may need to be built up from action design, taking account of the costs of delivery by partners and agencies. SQW (2009, p76) research on performance benchmarks found that the cost per entrant into employment can vary significantly, up to £20,000 for gross unit costs for the most intensive assistance for those requiring most handholding; in the case of those just made redundant, it would be expected that the unit cost would be lower given that workers would have a more recent history of employment. RTF (2006) reported a cost per job of £2,500 in relation to wage replacement subsidies. On skills assistance, the cost per person assisted with skills is likely to be of the order of £2,000-£10,000 depending on the level of intensity (SQW, 2009, p76).



Figure 7-5: Scenarios using 5 different shock types

Scenario	Domains	Indicative headline diagnosis	Potential actions & learning
closure/downsizing, declining non-strategic Existing business support schemes may be releved to the control of	Signposting businesses in the supply chain to HMRC Time to Pay scheme. Existing business support schemes may be relevant to businesses in the supply chain, such as MAS, AMSCI, UKTI support on exporting, Grants for Business		
industry, semi-skilled employees, significant local employer and concentration of significant supply chains locally - overnight closure	Supply chains	May be a case to support supply chains, in particular if there are alternative viable opportunities in new sectors and markets; the fact that it is a declining industry may preclude intervention, though this may heighten people impacts	Investment (response should make businesses aware of what is available). Bespoke support for businesses might involve a specific programme tackling common issues of supply chain businesses - this worked effectively in the West Midlands, e.g. through Accelerate, which provided individual company support, supply chain improvement, and support to networks in particular for automotive firms, but also in other sectors. Signposting people to mainstream support of Jobcentre Plus and Colleges, and use of existing mechanisms through Adult Skills Budget and ESF for skills development.
	Workforce & skills	Scenario implies large numbers of job losses, and a semi-skilled workforce with limited opportunities to find sector-specific work. Therefore, likely to be a strong case for intervention, covering issues such as up-skilling and re-skilling, accrediting formally existing skills, job search support etc.	This could be supplemented by the Talent Retention Scheme if there are skilled workers who could fill vacancies elsewhere. Bespoke support for individuals ought to involve further skills/training (e.g. support to workers to retrain for alternative careers) and further job search actions (e.g. jobs/careers fairs, coordination with employers - a common response in Scandinavia). These could be facilitated by relaxing eligibility, e.g. to enable workers to gain specific qualifications quickly without loss of benefits (as adopted following MG Rover closure).
	Place & communities	Scenario implies there may be a significant impact on local economy. Therefore, on equity grounds, there may be a strong case for intervention. There may also be a case around communities, in particular given potentially large-scale impact on communities that may be reliant on the employer/supply chains for employment.	A more interventionist approach, which helps people and place to adjust over a longer period, is to ensure businesses close sequentially over a longer period of time, through some form of incentive/intervention (e.g. taking some businesses into state ownership. This worked in Gothenburg in closing the shipyards; this would have the strongest case when closures are very significant, i.e. several thousand jobs, and a high concentration in a locality). On place, the evidence from previous shocks suggests that a scenario such as this will require a long-term, and potentially generational, response (e.g. VSEL in Barrow, response to shipyards closure in Gothenburg). Quick actions may involve packages to support immediate job/business creation. Longer-term actions will need to be formulated as part of a restructuring plan, covering sites, infrastructure, mix of inward investment and indigenous business creation, training and education, aspirations, and set properly within a formal strategy/regeneration framework. Cost implications of long—term commitment to address likely generational timescale a key consideration.
TYPE 2: potential large plant closure in a strategically important industry, but forewarning,	Business	Case to support the business given strategic importance and potential time to influence and/or shape actively the decision	Actions to support the business directly will depend on causes of the impending shock. For example, if it is a locational choice (i.e. between UK site and an alternative overseas), may be able to draw on a package of interventions around the business and its supply chains (e.g. Section 8 Assistance, exceptional Regional



semi-skilled employees, significant local employer	Supply chains	Given strategically important industry, likely to be a strong case for supporting supply chains if these are affected by the closure	Growth Fund, AMSCI) and its workforce (e.g. National Apprenticeship Service) - worked well in the context of GM at Ellesmere Port, and similarly for Ford at Halewood (including bringing forward a supplier park). Some of these actions we be appropriate for supply chains whatever the decision, as well as support to exporting (through UKTI). If the business is in difficulty for other reasons, e.g.
	Workforce & skills	Workers likely to have relevant skills for an important industry, so need to ensure these can be retained - therefore strong case for intervention	uncompetitive, then there would need to be consideration of whether there was a viable business and what issues need to be addressed, and whether the industry could be support in other ways, e.g. through supply chains or other programmes that are industry-wide rather than firm-specific. Given forewarning, there is likely to be time to put in place actions to support people,
	Place & communities	Whether there is a case for intervention or not is likely to be depend on the ultimate decision of closure or no-closure	e.g. Rapid Response Service, working with employer-provided support. Some bespoke actions may be needed to ensure workers with key skills can be redeployed, using the Talent Retention Scheme, sector-specific initiative, or coordination with other employers.
TYPE 3: announcement of closure of large plant, highly skilled and mobile workforce in relatively	Business	May be a case to try to influence the decision of the business - though would need to understand decision-taking	Potential actions to influence the business's decision could follow those cited under TYPE 2.People interventions likely to be around signposting to mainstream support, Rapid Response Service (if applicable) and working with the direct employer on what its own support will provide to workers. Some limited people support may still
buoyant sector, some forewarning of closure, limited local supply	Supply chains	Limited case for intervention given likely low level of impact here, and local resilience	be identifiable, e.g. very up-to-date training, PRINCE 2 type courses but low cost and very time limited in nature. Place response likely to need to focus on stimulating new economic activity. A range of possible actions may be appropriate depending
chains except for some service companies	Workforce & skills	Limited case for intervention given that workers are mobile, highly-skilled and will have wider opportunities, presuming transport connectivity is good.	on the issues, e.g. degradation of sites and infrastructure issues may require investment in assets and/or gap funding, need to improve profile may require inward investment activity combined with improvements to place offer. May be role for improved transport connectivity. It is important that place responses are integrated
	Place & communities	May be a case on equity grounds if the wider context of the local economy is depressed; if the wider context is more dynamic/buoyant there will be a limited case for intervention	with wider local strategy, and the most effective responses tend to involve an holistic approach covering place with business development and human capital interventions.
TYPE 4: Unexpected natural disaster - impact on high number of small/medium sized firms and wider locality, affecting infrastructure,	Business	Case to support local businesses affected by the disaster, e.g. to deal with issues such as restricted access, contamination, security (including bio-security), finding alternative premises, meeting cash flow and other obligations	Learning from past responses (e.g. Buncefield Oil Depot incident and response to floods), businesses require two key things: information and communication, including details of when they can access their premises and proactive measures to encourage businesses and people back to an area in the aftermath of a disaster; significant financial assistance through a flexible scheme and relief on rates. Workers should be signposted to the support of mainstream services, such as
local communities	Supply chains	Unlikely to be a concentrated effect on supply chains given nature of those businesses directly affected (i.e. SMEs). Some may be affected by the indirect causes of the disaster, and response could be part of the response to direct businesses.	Jobcentre Plus and voluntary agencies (e.g. Citizens Advice Bureau), on aspects like job search and other advice. This is likely to overlap with support to communities, where there is likely to be a need for citizens advice-type support. Infrastructure actions are likely to be required to ensure opening up of provision such as road, rail, and utilities. Evidence from past responses suggests a model of response that incorporates work groups to cover business, people and communities, and infrastructure separately. If



		Workforce & skills	Workers may be affected if businesses have to close, either temporarily or permanently. They may also be affected if their place of work moves location. Likely to be a case for supporting these individuals, in particular through mainstream services and coordination.	it is a national disaster, then a national oversight group could sit above local-specific responses. Bio-security responses will require investigation into causes and solutions, e.g. drawing on research institute expertise. Lessons will need to be learned quickly and communicate locally to inform actions on the ground.
		Place & communities	Likely to be a strong case for support in relation to infrastructure and communities in the aftermath of the disaster.	
6	TYPE 5: Unexpected event affecting primarily one large firm; local area not affected	Business	May be a case, depending on the event, nature of the firm, and the impact. Strategically important site in terms of national resource may prompt intervention. Larger firms often have disaster recovery processes, reducing the need for intervention.	If direct business provides some strategically significant resource for the country, e.g. in terms of healthcare, energy etc., and the firm requires some assistance, then there may be two key actions: i) attempts to ensure the business can get back to something like normality as quickly as possible; ii) identifying alternative options for meeting short-term resource requirements. Business actions with supply chains may focus on rate relief or other short-term financial assistance.
		Supply chains	There could be a supply chain effect, e.g. if the large firm was providing important components to others, and/or if companies were reliant on the large firm as a purchaser of their components. Short-term intervention may be required to address issues such as cash flow and maintenance of supply chain operations (there may not be a role for government in the case of the latter unless there are imperfect information issues, or issues of national security e.g. if components are vital to, say, the health sector).	Wider actions are likely to centre on assisting with coordination, e.g. with supply chains or workforce. The model/process for intervention may be led nationally given the scenario, and potentially involve national sector bodies.
		Workforce & skills	Likely to be a case for contributing to coordination between workers, unions, other worker representatives and employers on working arrangements etc.	
		Place & communities	No case for intervention in short-term; may need to be re-examined depending on longer-term future for the business at that particular location	



4a. Implementation - refinement and exit

- 7.22 There are two parts to consider as part of the last stage, implementation. There will need to be a process of review and refinement as actions are implemented. This will be through the response forms and the structures in place. Refinement will require clear mechanisms for reporting on progress and decision-taking on changes to strategy and actions. This will need to take account of monitoring and evaluation evidence (see Stage 4b) and may involve revisiting parts of the first stage, in particular to explore whether and how the nature of the shock and its effects are changing (as highlighted by Chapain *et al.*, 2011) or have turned out to be not as originally expected. There is no harm in partners changing their minds on appropriate actions, if the diagnosis of the shock changes over time.
- 7.23 As part of review and refinement, there will need to be a decision-taking process to exit formally from the immediate response to the shock. Based on the consultation evidence in particular the exit from response is a decision frequently taken by the Task Force or other model in place. Feedback suggests that this occurs when:
 - it is clear that mainstream providers can implement any outstanding actions required, and no further action over and above this is required
 - the actions set by the Task Force or other model have been satisfactorily completed
 - there can be a process of transfer of longer-term strategy and actions into a separately-established body this is likely to be appropriate in the case of longer-term economic restructuring (following a major closure or industrial decline, e.g. the role played by Furness Enterprise following the rundown of VSEL in Barrow-in-Furness) or longer-term regeneration of a particular site (following a major closure or disaster affecting a business park for example, e.g. regeneration of Maylands Business Park following the Buncefield Oil Depot incident).
- 7.24 In the case of recovery and response following a disaster, it was commented that some groups might last for longer than others. Immediate recovery in terms of the emergency response and response relating to infrastructure can be completed relatively quickly (i.e. within weeks or months). The response relating to business and communities, for example, may last for longer, perhaps for several years.
- 7.25 Based on the discussion, therefore, formal exit will be dependent on the specific context, the issues being tackled, the embedded risks, and the actions being implemented.

4b. Implementation – monitoring and evaluation

7.26 The final part of the process is to learn from the response through monitoring and evaluation. This may help to understand how far original issues have been addressed, as well as inform decisions on responses to shocks in the future.

Indicators

7.27 Figure 7-6 provides some of the key indicators to consider in assessing progress against the four domains. As has been reiterated through this framework chapter, monitoring and



evaluation will also be dependent intimately on the context and the actions implemented. Nevertheless, Figure 7-6 sets out the likely headline indicators that would closely related back to the issues that are likely to have prompted intervention. The guiding rule here is that indicators (of activity, output and outcome) should be driven clearly and explicitly from the defined objectives of the intervention being made. For example, under "business" key indicators cover employment of the business over a time period after support, and the location and size of businesses that have been supported after disasters (to track whether they survive and when they get back to some kind of normality). Indicators under "supply chains" focus on the extent to which businesses have moved into new markets as well as perceptions of survival chances. Indicators under "workforce and skills" consider labour market outcomes, including destinations, skills and qualifications and pay, as well as, more broadly, satisfaction levels. Under "place", there may be a wider set of issues to consider, as place-based and restructuring responses can be quite wide-ranging; suggestions of key indicators are provided in Figure 7-6, though it is anticipated that partners will want to supplement these in the context of the specific shock experience. It is important to note that these indicators highlight the imperative of putting in place monitoring systems that can capture those individuals and businesses benefiting, and their status over time.

Evaluation design

- 7.28 A key issue to note is on the robustness of evaluation evidence. As European Commission (2010) notes, there is a lack of rigorous evaluation evidence on the impact of restructuring responses. Much of the literature on shocks draws on evaluation design that focusses on beneficiary groups only (rather than comparing beneficiary groups to non-beneficiary groups), though higher quality studies have offered comparison groups of non-beneficiaries (in particular studies assessing relevant programmes), comparative studies between different shock responses, and/or longer-term tracking studies. We would reiterate the point about being overly dismissive of past evaluation evidence: yes, this may not be perfect, but responses to shocks by definition often have to be put in place quickly with little time to consider evaluation design. In particular, it would be very difficult to establish formally any randomly-assigned control groups in the context of a shock situation, and it would be very difficult for local partners to justify implementing actions for sub-sets of those affected by shocks, especially in competitive labour and business markets. More generally, comparison groups of non-beneficiaries often require careful identification and research tools that can contribute to a robust assessment (e.g. to ensure sufficient sample sizes, to enable appropriate data on characteristics is gathered to inform any matching required). Analysis of beneficiary and non-beneficiary groups also requires frequently expert econometric modelling capability and capacity.
- 7.29 Nevertheless, as BIS seeks to strengthen its evaluation evidence base, some approaches could be taken that increase the robustness of design, in particular by exploring the use of comparison groups and also longitudinal datasets, supplementing self-reported assessments of additionality. Headline thinking is provided as follows, though it should be noted that that all of these options would require careful implementation (e.g. given possible ethical issues) and careful interpretation of the findings.



Evaluating the effects on direct businesses

- 7.30 For businesses supported to prevent and/or reduce business closure or rationalisation, it will not be possible to identify any formal comparison group as part of evaluation design. Therefore, in assessing the net benefits, there will be reliance on self-reported assessments, or perhaps some comparison between pre-intervention plans for the business, and post-intervention outcomes. As ever, in dealing with self-reported assessment, Optimism Bias is a major issue, and should be accounted for.
- 7.31 For those direct businesses supported in response to disasters or other events, again the counterfactual scenario would be difficult to replicate through any form of comparison group. Therefore, again self-reported assessments of additionality and benefits may be the most appropriate design for evaluation.

Evaluating supply chain initiatives

- 7.32 There might be two options to provide a non-beneficiary group to which beneficiaries could be compared:
 - supply chain companies not taking-up support this would require being able to identify the supply chain companies affected, and being able to contact them to gather data, and/or otherwise collect data from administrative datasets (a variation of this option could be if there was eligibility criteria that meant some businesses were not able to take advantage of support)
 - a group of businesses operating in the sector, but in another part of the UK and not part of the supply chain relevant to this shock again there may be identification challenges.
- 7.33 Of course, neither group is necessarily a strong match to the beneficiary group, because the former has self-selected to not take advantage of support (though this might be overcome in the variation based on eligibility, though this itself introduces bias), and the latter may well not be facing similar issues in its markets. However, both might provide an indication of 'normal' business that beneficiary businesses are seeking to attain, though in making such an assessment it would be important to be able to gather quite detailed data on both beneficiary and non-beneficiary groups (e.g. on performance metrics, capabilities, challenges faced etc.). A third option for design could be to draw comparisons 'within' the overall beneficiary group. For example, there might be capacity challenges that mean some businesses receive support earlier than others or indeed some businesses may have taken advantage of support in advance of a shock (therefore, comparisons could be drawn on the timing of response); or there may be more than one model of support that is provided (therefore, comparisons could be made between the two models).

Evaluating actions around workforce and skills

7.34 A non-beneficiary group could be identified by creating a similar group of individuals going on to the unemployment register at the same time as redundant workers. The outcomes of the beneficiary group could be considered in the light of those in the non-beneficiary group. This would require data linking to the datasets of other departments or agencies (e.g. Department for Work and Pensions and Her Majesty's Revenue and Customs). We



understand that there are currently some constraints in doing this, but that this option is becoming potentially more useful over time.

- 7.35 There might be further options that consider 'within' beneficiary group design or look at those not taking up support (or different parts of support available). These might include the following:
 - Comparing a number of different groups depending on the level of support taken, e.g. those not taking advantage of support, those taking only a small amount of support available, and those who are more intensively supported. These groups are not directly comparable, as there is clearly self-selection in terms of take-up of support. Therefore, the interpretation of results would need to be undertaken very carefully, as similar outcomes across all three groups would not necessarily mean that intensive support made no difference in comparison to 'no support'. Indeed, it may mean that the intensive support had enabled workers to achieve positive outcomes, and on a par to those that did not need any assistance. Therefore, detailed data on the characteristics of workers would need to be collected and modelled carefully to assess the contributions of interventions.
 - Comparing groups depending on the time at which they had been able to take advantage of support. The allocation to different groups may be 'natural' in that it could be down to the capacity of providers. The attraction of this design might be to ascertain levels of deadweight in assisting individuals immediately after they have lost their jobs (as opposed to waiting a number of weeks).

Evaluating place actions

- 7.36 For place actions, it will be difficult to establish a counterfactual given the specific context, combination of issues and package of interventions. Indeed, place-responses are likely to be 'complex' rather than 'simple', making comparator or control group studies very difficult to implement. This means that there will not be one primary cause and one primary effect of interest, with many influencing factors and a complex relationship between inputs and outcomes.
- 7.37 Whilst for some discrete actions (e.g. supporting businesses in a place context) there might be scope to include comparator groups for evaluation purposes (comparing between benefiting and non-benefiting firms), for the broader packages it may be more appropriate to adopt a theory-based approach. This would mean grounding the evaluation of place packages in the logic models and 'theories of change' that can test the assumption of how actions and inputs have, in practice, led to outputs and outcomes. This would require combinations of quantitative and qualitative methods.

Comparing outcomes between shocks

7.38 As has been re-iterated on a number of occasions in this report, the context of shocks has an important bearing on the impact/potential impact, the case for intervention, and the appropriate response actions. Following the logic through, therefore, the context will also affect the outcomes of those response actions. As a result, comparisons of outcomes between shocks are likely to be difficult. Nevertheless, if there is good data available on two



shocks that could be viewed as similar (i.e. similar local economic context, sector, scale of impact), it may be appropriate to draw some broad lessons, which could include comparing outcomes. However, such analysis would need to be undertaken carefully, and the results treated with some caution.

Processes to facilitate monitoring, evaluation and learning

- 7.39 As should be clear from the discussion of evaluation design, a critical element will be having data on those workers and businesses that are affected by a shock. This will need to include at the outset, the contact details of those affected. In addition, an immediate step will be to establish an effective system and process for monitoring, which gathers key data over time, including:
 - the characteristics of businesses (e.g. sector, performance metrics, capabilities, existence of business plans, nature/location of markets) and/or workers (e.g. skills, qualifications, occupation, past employers and timing of employment) affected
 - the support that businesses and workers take advantage of, and when they receive such assistance
 - if possible, unique identifiers that can be used to link to administrative datasets such as those held by ONS, DWP and HMRC (e.g. VAT registration number, National Insurance number) to enable longer-term assessments of outcomes.
- 7.40 The capacity of local partners to establish such a system quickly will probably vary, and so this could be a practical area where BIS may wish to provide support. Experience suggests that those shocks where there was foresight and/or pre-shock actions tended to have better quality datasets (e.g. in the cases of LDV and MG Rover), or coordination with business HR/procurement departments and unions. In terms of establishing evaluation design, this will be very difficult to do quickly, in particular when partners are focussing on the immediacy of the shock itself. Therefore, off-the-shelf evaluation tools that can be easily tailored may be beneficial, and support from BIS may be welcomed. There are likely to be significant ethical and data protection considerations in evaluation, in particular relating to contacting individuals/businesses for evaluation purposes at the time of a shock, in tracking their subsequent activities (e.g. retraining, where providers might be protective of personal data), or in any randomisation used in evaluation. BIS should consider how it might address these issues, e.g. ethical considerations, quickly in the event of evaluating shock responses.



Figure 7-6: Stage 4b. Implementation - Monitoring and evaluation

Domain	Key indicators to measure progress in the domain	Commentary on M&E and counterfactuals
Business	Employment of business/factory after support (source: business HR team) Skills/qualifications of workers after support (source: business HR team) Location and size of businesses over time - especially for those	Difficult to identify a counterfactual scenario, so key purpose is to identify how a business responds post-support (scenario 2); and how quickly businesses return to normality (scenario 4). Additionality would have to be judged based on what might have happened in absence of support (e.g. relocation in the case of scenario 2) and asking businesses themselves to self-assess.
	affected by disasters (source: survey/tracking of business owners)	Ü
Supply chains	Key performance metrics of companies affected, e.g. turnover, employment over time (source: survey of businesses, or use of ONS Virtual Microdata Laboratory) % turnover from business closing, local markets, national markets, international markets over time (source: survey of businesses)	A non-beneficiary group of those supply chain companies not taking up support could be established. Whilst not a like-for-like comparison group, a sub-sample of those surviving from this group provides a set that could be used as 'normal' business. An alternative approach might be to seek a matched group from similar sectors located elsewhere.
	Perceptions of survival chances over time (source: survey of businesses)	A third approach could be to examine whether there are comparisons that can be drawn depending on when and how supply chain businesses take up support, e.g. to assess different models or speeds of response (including those taking up pre-shock support).
Workforce & skills	Destinations of workers affected over time (source: survey of workers, or linking to DWP datasets on benefit claims as a proxy)	A longitudinal approach could be used by linking to DWP data and HMRC data. This could also be used to identify a non-beneficiary group of other workers going on to the unemployment register at the
	Skills and qualifications of workers affected over time (source: survey of workers)	same time and comparing outcomes. Whilst not a like-for-like comparison group it provides some indication of a counterfactual that could supplement self-reported assessments made by workers.
	Pay of workers affected over time (source: survey of workers, or in the future potentially through linking to HMRC datasets)	Alternative design approaches could include comparisons between different intensities of support received, and the different timing of
	Satisfaction of workers affected over time (source: survey of workers)	when support is received. In evaluating workforce actions issues relating to satisfaction and pay are important considerations, because some workers have been found to be more satisfied despite earning less following redundancy - e.g. if they are in different careers. Moreover, in the case of some shocks, relatively high-paying businesses have closed, and so it may be expected that pay may fall for some workers.
Place & communities	Will vary, but may include: - Local employment overall - residence and workplace-based (source: Labour Force Survey, Business Register and Employment Survey) - Workplace based employment by sector (source: Business Register and Employment Survey) - Workplace based employment - public vs. private sector (source: Business Register and Employment Survey) - Inward investment enquiries and conversions (source: UKTI)	Evaluation requirements likely to vary depending on individual actions undertaken. Quite difficult to establish a counterfactual for place/community interventions given the specific context, combination of issues and package of interventions.



7.41 In general, monitoring and evaluation efforts should be proportionate to the scale of funding deployed, and possibly the scale of the shock. Of course, this should not necessarily hold when the response to the shock has been novel and/or contentious, and there is particular learning to be gained. The scale of evaluation efforts will therefore inform the nature and detail of the outputs produced at this stage. At a minimum, all responses involving BIS input (including those where it acts as an advisor on a task force) should involve a structured debriefing to assist with learning. At the other end of the spectrum, more active responses are likely to require comprehensive evaluation studies at a short-term juncture (e.g. after one year), and at appropriate times thereafter to assess the longer-term actions and sustainability of short-term outcomes. More generally, the need for BIS to establish and manage a thorough up-to-date and accessible repository of evaluation evidence in terms of shock events, shock responses and wider regeneration consequences is clear. This should include, at a minimum, commissioned work by BIS and its agencies from the last 10 to 15 years, which could then be built out progressively over time to include material from other appropriate commissioners.

Summary of key points in implementing the framework

- 7.42 In concluding this chapter on the framework and the report, in looking ahead to implementing the framework, a number of key points should be emphasised for decision-takers, including Local Authorities, LEPs, BIS and other partners involved:
 - The framework provides the key considerations for BIS and its partners in shaping decisions on whether there is a case for intervention, what appropriate actions ought to be, and the response forms that may be most suitable. It is important to note that each shock is different, given the combination of causes, issues, institutions, and possible effects. As a result, the framework should be seen as a guide towards critical thinking and decision-taking around these issues. The framework seeks to be as illustrative as possible in informing this thinking and decision-taking process, for example with scenarios presented and indicative solutions to the issues in these cases.
 - In considering whether there is a case for intervention, a key issue to explore is the scale and scope of the shock and its issues. In doing this, partners such as Local Authorities and LEPs, may wish to draw on case material in the report and elsewhere in making these judgements. Though there are no hard and fast benchmarks given the context-specificity, they can provide an indication of how the shock may compare to similar types of shocks in the past.
 - It is important to note that a range of mainstream services and existing initiatives are already in play that would be appropriate in responding to shocks. These include services through the Insolvency Service, Jobcentre Plus and Skills Funding Agency in the case of mainstream support, and through a range of funding opportunities and national programmes (including those of BIS) in the case of existing initiatives. Therefore, whilst intervention may be appropriate in dealing with a shock, partners should note that some of the response actions will be focussed on communication and signposting to mainstream services, and leveraging existing programme spend.



- Bespoke actions may be appropriate, and in taking decisions on these, partners should think about what is most appropriate in the context of the shock. There are a number of lessons set out in the case material in chapter 5 and the synthesis of learning in chapter 6. These should be drawn on to inform what may be the most appropriate responses. In a real sense, there is often little 'new under the sun', and there is much to learn from past models such as the Enterprise Agency, Action Team, and discretionary funding types of response.
- Structures are critical in responding to shocks, in terms of having appropriate leadership, developing the right partnerships between organisations, and having structures that can facilitate effective response, and have the capability to multiplex economic development issues in the round; the LEP model, rightly led by private sector representatives, may have some limitations here. In implementing the framework, identifying the right structures and any relevant strategic frameworks is a key part of the decision-taking process. Quality people are key to effective structures and responses, and such quality means more than simple representation.

7.43 In addition to the points noted above, there are three further points for BIS to consider in the practical implementation of the framework:

- Having sound intelligence on shocks, both to potentially foresee them (and so mitigate against them) and to facilitate action, has been found to be a key determinant of effective response. Whilst there is limited capacity for BIS and local partners to be able to foresee shocks, this type of intelligent foresight is a useful aspiration to have. Therefore, using networks through BIS Local, BIS sectoral teams, sector organisations, and Local Authorities can help to contribute to foreseeing shocks. The sharing of information - where possible - across organisations, can be critical in building up a more accurate picture of developments and possible impacts. Once closures have been announced, or events have occurred, a critical first step should be to gather appropriate data to help diagnose and understand the shock, and contribute to effective actions in response. Working with appropriate partners, this type of intelligence gathering could and should be implemented as quickly as possible. This is also fundamental in informing more robust evaluation approaches to shock responses. There are wider issues to be considered in this context where BIS will have a key role to play, for instance in evaluation design. Some care is needed in designing evaluation in shock situations, given the speed of response required. As a result, comparison group approaches are unlikely to be strong matches, and so care will be needed in interpreting the findings.
- Effective responses in the past have been able to bring together discretionary resource quickly along with flexibilities that can help to implement actions. The evidence suggested that the current context provides less discretion and flexibility that was available in the past. Though the exceptional Regional Growth Fund (eRGF) does help to address this in part, BIS should consider how it can play a role through its own agencies and across government in leveraging existing funding streams if further discretion and flexibility cannot be provided, especially for larger shocks.
- In responding to shocks, sound leadership and structures often require support through capacity and capability in a range of areas, for example gathering data,



consulting with partners, businesses, workers, communities, and identifying and implementing actions quickly. This capacity and capability varies across the country: in some cases, local partners will be able to marshal a response quickly; however, in other cases, capacity and capability may be a more significant barrier. BIS may need to provide additional support to this latter group to ensure an appropriate response can be deployed.



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Annex B: Details of the literature search

- B.1 Given the short timescale available for the literature search and review, the approach taken was pragmatic and focussed. The following search terms were used in GoogleScholar and IDOX for articles published between 1995 and 2013 to identify an initial long list of relevant literature. Boolean ANDs were used to combine the most relevant search terms in order to produce manageable lists for sifting.
 - "plant closure" AND "task force" AND "restructuring"
 - "business closure" AND "task force"
 - "plant closure" AND "employment outcomes"
 - "business closure" AND "employment outcomes"
 - "plant closure" AND "government response"
 - "industrial restructuring" AND "path dependence" AND "government response"
 - "economic shock" AND "closure" AND "path dependence".
- B.2 The searches yielded 484 hits on GoogleScholar (including some duplicates), and 65 individual articles through IDOX.
- B.3 An initial sift was undertaken based on titles and available short abstracts, and duplicates were removed. The sift sought to identify relevant articles under the following three categories:
 - general texts on economic shocks and restructuring, including processes and structures such as Task Force models
 - UK case study material
 - international case study material, drawing on relevant national contexts (i.e. Europe, USA, Canada, and Australia, New Zealand and Asia Pacific).
- B.4 This produced a long list, which, when combined with other material with which we were also aware, of 127 pieces. A short list of 31 articles was identified. This was undertaken pragmatically, again drawing on abstracts, to ensure a breadth of articles across the three categories above and width in terms of types of shock and sectors.



Annex C: Consultee list

Table C-1: Consultee list

Name	Organisation
Harry Knowles	Barrow Enterprise
Phil Roocroft	Birmingham City Council
Cllr Jack Richardson	Cumbria County Council
Jane Belfourd	Department for Business, Innovation and Skills
Paul Blackmore	Department for Business, Innovation and Skills
Nicolette Divecha	Department for Business, Innovation and Skills
Brian Greenwood	Department for Business, Innovation and Skills
David Higham	Department for Business, Innovation and Skills
lain McNab	Department for Business, Innovation and Skills
Stephen Webster	Department for Business, Innovation and Skills
Jim Gill	Freelance consultant; formerly of English Partnerships and Liverpool Vision
Owen Tomlinson	Hertfordshire County Council
Sharon Lewis Insolvency Service – Redundancy Payments	
Sarah Cole	Jobcentre Plus
Barbara Cooper Kent County Council	
Pankaj Mistry	Leicester and Leicestershire Local Enterprise Partnership
Rachel Eade	Manufacturing Advisory Service West Midlands
Alex Burfitt	National Audit Office
Ann O'Driscoll	North Bristol Sus Comm
Marcus Walker	North Lincolnshire Council
Dinah Jackson	Northumberland County Council
Paul Moffat	Northumberland County Council
Roddy MacDonald	Scottish Government
Deryn Martin	Skills Funding Agency Hampshire & Isle of Wight
John Adams	Skills Funding Agency West Midlands
Huw Owen	Welsh Government
Richard Thomas	Welsh Government



Annex D: Long list of evidence on what works

Table D-1: Responses to shocks

Shock	Response	Commentary on effectiveness			
Business-specific sh	Business-specific shocks				
Redundancy of c.1500 from Harland & Wolff shipyard, Belfast ¹⁴	An Assembly Taskforce by Northern Ireland's First Minister and Deputy First Minister, which sought to coordinate the provision of redundancy and retraining advice for workers, establishing a `onestop shop' for information on training, benefits and employment opportunities. In addition the Bridge to Employment model was implemented for the Harland & Wolff cohort, with employers and government working in partnership to provide supported employer-linked pre-employment training to aid in filling vacancies. It involved both on-the-job and off-the-job training, with unemployed participants given an interview at the conclusion of the training.	Post-redundancy pathways were generally positive, with two thirds of respondents finding work in 6 months, 23% still looking and 9% inactive. By summer 2012, nearly 80% were employed, with 10% unemployed. Worker interviews revealed a favourable view of the 'one-stop-shop' provided by the Taskforce but, despite the emphasis on training as a response to redundancy, take-up of generic skills provision was low, with fewer than ten former employees taking training or further education options. Substantial barriers to training included the cost, family commitments, and issues with trave Take-up of training was greater when tied to employment. The paper argues the labour market's demand-side should have had more attention, with training likely to be unsuccessful without jobs having been			
Closure of the Anglesey Aluminium smelter in September 2009, with the smelter employing 500 downgraded to a 're- melt facility' employing 60 15	Initial government response was a £48million, 4 year aid package dependent on a commitment from the business to guarantee a 350 head workforce. This offer was rejected and full closure announced. Negotiation was not substantial. Post-closure, the Anglesey Aluminium Community Action Group was convened, led by Welsh Government and Anglesey County Council. Terms of reference for the Group focussed on mitigation of impact. Initial action was a Retraining & Reskilling Sub-Group focussing support on direct and supply chain workforce. Subsequent activity included a focus on inward investment. The redundancy package extended to the workforce included guidance from a 'Careers Wales' advisor, access to an assigned consultant from DBM, access to a career centre staffed by DBM, independent financial advice, and presentations from Jobcentre Plus on JSA, as well as an employee assistance programme comprising both telephone and online assistance.	Business-focussed activity included a series of inward investment appeals by a partnership between Anglesey County Council, Welsh Government, and Anglesey Aluminium, which led to a partnership with Stena to repurpose the Anglesey Aluminium jetty, and the sale of land option to Land and Lakes tourism development company (with the potential to deliver 600 jobs) Evidence 18 months after the closure suggested that most workers who sought new employment got it, though this is not characterised, other than to say that much of the available work was less well-paid than Anglesey Aluminium – the quality of employment available was at a lower level than the training Welsh Government funded too, resulting in a mismatch in skills and jobs. However, tracking of those made redundant was poor, with poor information gathering noted. Nevertheless, commentary suggests good practice in the form of the initial redundancy package, even with negative perception of the initial aid offer.			

¹⁴ Shuttleworth, I. Tyler, P. McKinstry, D. (2005) 'Redundancy, readjustment, and employability: what can we learn from the 2000 Harland & Wolff redundancy', *Environment and Planning*

¹⁵ Plows, A. Davis, H. Davies, R. (2011) Responses to Redundancy at Anglesey Aluminium: Narratives of Transition



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Shock	Response	Commentary on effectiveness
Closure of Motorola in West Lothian ¹⁶	The government's response included a task force and provision of £10million to facilitate task force activity, setting up an on-site presence – 24 hour opportunities shop, including information sessions, newsletters, jobs fairs, vacancy display/matching, access to training and education, business start-up, advice on tax and benefits,	Take up of business support offered was low. DBM (private sector) services were the most widely used – and double the percentage of survey respondents thought that DBM services had made a big contribution to prospects – job search / CV preparation services scored the highest usefulness rating, while the helpline service made little/no contribution to their prospects.
	and preparing a costed action plan. The task force also provided support to supply chains – this included a risk assessment of companies that could face "critical" problems. Companies were contacted to offer support, including business advice, marketing support, e-commerce, people-based development,	Total staff redeployed by March 2002 was 76%, so it was on track to meet redeployment targets – all results based on large survey – with women and those between 25 and 44 most commonly redeployed, and with 68% reporting reduced take-home pay and a third travelling further for their new job.
	export assistance, financial support, business advisor services. Private sector response – Motorola employed DBM to operate an onsite 24 hour "opportunities shop" (careers centre and internet café), which focused on careers advice, guidance, CV and interview skills,	The overall view was that the workforce had come through the transitional period reasonably successfully, with workers attractive to other employers, flexible and adaptable. Follow-up calls ensured those that still needed help got it. However, the release of workers had a significant negative impact on the people who were already unemployed and seeking work, whilst redeployment outcomes are reported as being a function of personal characteristics, work history and labour
After the majority of staff had been released, off-site services were introduced by both the task force and DBM, plus job fairs, tracking service and helpline service. Scottish Development International worked in partnership with Motorola's agents on the disposal of the site – production of marketing material/marketing programme.	market conditions. Disposal of the plant was swift and successful – aided by Scottish Development International, Motorola's agents and the Council.	
	Motorola's agents on the disposal of the site – production of marketing	Moving quickly is seen as a key requirement, ensuring company involvement in the process, and identifying high risk individuals – in this case the development of the action plan was too slow, whilst identifying need could have been improved.
The effects of the closure of Rover/MG Rover at Longbridge 17 18 19 20 21 22	Two task forces were established in relation to MG Rover, and are said to have been sectoral, economic and regional in nature: RTF1 - established in response to announcement of the sale of parts of the Rover Group in 2000 by BMW, anticipating possible future closure. RTF1 focused on modernisation, diversification and regeneration. Prominent area-based initiatives included the 'high-tech corridors', whilst people focused efforts included skills	Some criticisms of the support offered to the ex-workers on the grounds that it may not have been sufficiently tailored to their needs is evidenced – in particular, the insensitivity of some case workers, the lack of or unsuitability of some training courses and the lack of availability of counselling. Furthermore, it was more difficult for older and low-skilled workers to adjust to closure. Wages were also lower in jobs post-closure. More widely, concern is noted as to the negative impact on shops and services of the closure, and with the RTF being too narrow

¹⁶ Yellow Book, TERU, Swift Research (2002) 'Motorola Task Force Evaluation', Report to Scottish Enterprise

²² Bailey, D. Chapain, D. de Ruyter, A. (2012) 'Employment outcomes and plant closure in a post-industrial city: An analysis of the labour market status of MG Rover workers three years on', *Urban Studies*, 49(7), 1595-1612



¹⁷ ECOTEC (2007) Evaluation of the Rover Task Force 2000 and MG Rover Task Force 2005 Programmes

¹⁸ Bentley, G. Bailey, D. de Ruyter, A. (2009) 'The MG Rover Closure and Policy Response: An evaluation of the Task Force Model in the UK', *Economics, Finance and Accounting, Applied Research Working Paper Series*, Coventry University Business School

¹⁹ Beer, A., Thomas, H. and Bailey, D. (2008) 'A tale of two regions: comparative versus competitive approaches to economic restructuring', Policy Studies, Vol. 29, No. 3, 357-370

²⁰ Hall, S. (2012) 'Planning for industrial closure: lessons from the experience of Longbridge, Birmingham', Urban Research & Practice, Vol. 5, No. 1, March 2012, 175-179

²¹ House of Commons Trade and Industry Committee (2007) 'Success and Failure in the UK Car Manufacturing Industry', House of Commons

Shock	Response	Commentary on effectiveness
	related programmes, and business focused efforts included start-up support. Support from DTI totalled £129m. • RTF2 - established very quickly following the April 2005 announcement that MG Rover was going into administration, with support for suppliers, the workforce, vehicle retailers and the local community, and with the provision of advice to AWM on progress and how policy needed to adapt – support totalled £176m. This involved both emergency measures and long-term actions. Efforts additional to RTF1 included the Wage Replacement Subsidy (WRS).	in remit. However, community engagement work was commended, as was the use of industry expertise. In addition, the majority of workers found work after closure, with 90% in some form of employment by 2008. RTF1 was felt to have saved between 10,000 and 12,000 jobs between 2000 and 2005, whilst the post-closure WRS secured 1,329 jobs. Also commended, and noted as a determinant of success, was the prompt public sector response to developments at the plant (sale and closure).
Closure of an unnamed R&D operation in the NE, in the power engineering sector ²³	The major response was led by the Joint Union Committee (JUC), whose response was to prepare an anti-closure report, challenging the rationale and lack of consultation, with lobbying and community mobilisation seeking to reverse the closure decision, and to work with the parent business to coordinate redundancy support and outplacing. A local MP led an anti-closure working group which involved GONE, Northern Development Company, and Tyneside TEC, and which issued a 'business case' for retention of the company's operations in the NE, supported by public funding.	Intervention was ineffective, largely due to a stance by stakeholders that the closure was a commercial decision, with few opportunities for intervention – added to the fact that it was a small size of the company, and stakeholders were confident in attracting other R&D investment and technology development initiatives. As such JUC's adversarial anti-closure campaign failed to secure stakeholder support, and the parent company did not engage with the process. The intervention is criticised for a lack of strategic thinking, with it noted that the timing of the intervention should have impacted the nature and objectives of any intervention. JUC did manage to negotiate enhanced redundancy settlements and closure payments but, ultimately, 38% of the 84 were made redundant with unknown prospects whilst the remainder relocated.
Closure of the Siemens Microelectronics plant in North Tyneside ²⁴	Siemens' presence in the North East lasted only three years, after which an exit strategy was negotiated between Siemens and the national Government. The region's Micro-Electronics Sector Strategy Group was responsible for approving investment in the sector in the region, and worked with Siemens until closure, after which their focus changed to being about the role of the sector in the region and the business support it required.	A fundamental shift that the behaviour of agencies was demonstrated. Whilst the investment was short-lived, it stimulated new ways of thinking necessary to improve economic performance in the region, with, for instance, FE working together and with companies to broaden their training in the sector, and with funding for SMEs in the electronics sector. Furthermore, the approach was deemed innovative, as it was reflexive, trans-disciplinary and heterogeneous. Having a strategy document underpinning the region, created the institutional capacity to respond to change. That said, the response was initially constrained by institutional limitations.
The closure of the Selby coalfield ²⁵	A Task Force, led by Yorkshire Forward. It was set up in August 2002, and was a short term measure completing its work before the mine even closed.	By September 2003, the Task Force was found to be redundant, with its recommendations implemented. 300 miners had already taken voluntary redundancy, with 83% finding alternative work. By this point, 30 miners per month were also leaving Selby, ahead of closure in Spring 2004, when the

²³ Pike, A. (2005) 'Building a Geographical Political Economy of Closure: The Case of R&DCo in North East England', Antipode

²⁵ Henderson, R. Shutt, J. (2004) 'Responding to a Coalfield Closure: Old Issues for a New Regional Development Agency?', Local Economy, 19:1, 25-37



²⁴ Charles, D. Benneworth, P. (1999) 'Plant Closure and Institutional Modernisation - Siemens microelectronics in the North East', Local Economy 14: 200

Shock	Response	Commentary on effectiveness
	The Selby Coalfield Task Force Report suggested two efforts for businesses, including assistance to SMEs specifically, and the creation of new opportunities through financial incentives and bringing sites forward for development. The impact study of the closure argued for skills and training extending beyond Selby, and involving Jobcentre Plus, Guidance Enterprises Group and local FE colleges, as well as arguing for Yorkshire Forward to seize opportunities arising from the location, and for a development review of Selby, Wakefield, and the mine itself. A workforce needs survey identified the need for one-to-one support on job opportunities and training needs.	remaining 700 miners would lose their jobs. Benefits of the approach included the engagement of key decision makers, multiple agencies and expertise, and the leveraging of funding from national and regional sources, whilst swift mobilisation of people and resources is said to be an advantage of the Task Force approach. In providing strategic direction and allocating resources from its own budget, Yorkshire Forward was said to offer insights to other RDAs as to how a 'joined-up', strategically coordinated approach may help to alleviate the effects of a regional crisis.
The collapse of Northern Rock ²⁶	The Northern Rock Response Group was formed, and involved Northern Rock, Job Centre Plus, the Learning and Skills Council, Business Link North East, the North East Chamber of Commerce, CBI, Newcastle City Council and Sunderland City Council, with a number of outplacement support packages, Jobs Fairs, vacancy websites, benefits advice, careers advice, and training being the result. In terms of the business itself, Northern Rock was nationalised, becoming 100% owned by the UK Government, following unsuccessful attempts to find a private sector buyer. There were three core objectives to restructuring, these being to repay the financial support provided by the Bank of England (c. £27billion), to re-organise into a smaller, viable mortgage operation, and to be more sustainable in terms of funding and capital.	Only 53% of workers used the support offered, a lower level than was experienced in other cases in the North East. Very few, only 13% of workers, when surveyed, stated that they had found new employment through support from the Response Group, with most doing so independently. Such low engagement was found to be due to a pessimistic view of the labour market and of what any institutional support could do about it. Engagement was actually higher amongst the higher occupation groups. Limited influence is also noted as being due to a high capacity for low wage service employment in the North East. It is noted that the response group's experience perhaps points to traditional responses used for heavy industry shocks being inappropriate for low-skill service sector shocks.
Mine closures in Rhondda Cynon Taf and Mansfield in the 1980/90s ²⁷	Regeneration of these former coal-mining areas involved attempts at attracting investment, including inward investment from elsewhere. Both local authorities attempted to attract public sector funding by projecting themselves as areas that suffered from poor infrastructure and high unemployment and poverty.	Top-down projects with an emphasis on economic development are noted as tending to have had short-term time horizons, whilst they have failed to provide enough employment for former colliery workers. Furthermore, even where FDI (Foreign Direct Investment) is successfully attracted, it is nevertheless vulnerable.
	Government thinking of the day pointed to the merits of partnership working, joined-up thinking, and community empowerment, with macommunity initiatives being the result. This included those initiated socially entrepreneurial immigrants, those locally-initiated by committed local residents, and those formally initiated by governments.	In terms of community projects, those initiated from a top-down perspective were also said to be more likely to fail than those initiated indigenously, and indeed can be met with hostile responses from the communities they are to represent. Community projects can also be met with hostile reactions if they broaden out and are felt to be controlling what other community groups feel they should

²⁶ Dawley, S. Marshall, N. Pike, A. Pollard, J. Tomaney, J. (2012) Placing Labour Markets in the Evolution of Old Industrial Regions: the Case of Northern Rock

²⁷ Bennett, K. Beynon, H. Hudson, R. (2000) 'Coalfields regeneration: Dealing with the consequences of industrial decline', Policy Press and Joseph Rowntree Foundation



Shock	Response	Commentary on effectiveness
	and other organisations.	control, for instance funding for the community. Community initiatives do, at the very least though, often bring disused building back into use.
Restructuring paths of chemical plants in Teesside and Brindisi ²⁸	ICI's restructuring in Teesside occurred at a time when the government wanted industrial competitiveness to be dealt with by market forces and a flexible workforce. ICI's restructuring therefore involved downsizing of activity and redundancies. Where efforts were made to mitigate the shock, it was sectoral organisations like Teesside Chemical Initiative that played a bigger role, though they were more concerned with attracting FDI. Italy, however, operated a different philosophy, with the government much more active in presenting a number of options for the plant in Brindisi, working with employers and trade unions, and defined by a collective-decision making process.	Brindisi was slower to react than Teesside, due to the state-owned nature of the industry and the insulation it was given due to its perceived social role. However, Brindisi's restructuring being directed by the state allowed for the social consequences of the changes to be ameliorated. Teesside on the other hand could be more responsive to the market, but with the effect that company interests dictated management of redundancies with the role of other organisations smaller.
Closure of military bases by the US Base Realignment and Closure (BRAC) commission in New England ²⁹	 The responses differed by each military base that was closed: Pease – nine month planning period, produced reuse plan focusing on private sector development, financial incentives offered to businesses, state made \$500million available in bonds Fort Devens – developed zoning and reuse plans, created Economic Opportunity Area with tax deductions and other economic incentives to business, infrastructure improvements, state bond of \$200million for redevelopment and marketing of the site and infrastructure improvements Loring air force base – created a redevelopment plan, secured federal grants and state funding for building renovations, marketing, salaries, environmental remediation South Weymouth naval air station – created a reuse plan over 18 months of planning and 150 public meetings. A development company was selected to implement the plan of mixed use development Brunswick naval air station – developed a reuse plan, which includes advanced technology and research centres, business incubators, also leveraged financial grants and state incentives to 	The research found that base closures have had little impact on the unemployment rate, with the employment rate improving after closures, and outmigration of military staff in fact acting as a relief valve, reducing the shock. Base closures encouraged a stronger economy, and improved per capita income, due to military salaries being low. It's important to note that the paper suggests the military closures to date have been in relatively buoyant locations, so the effectiveness of interventions and general recovery rate is likely to be biased. Future closures are more likely to be in remote/struggling areas, so recovery will be more difficult, whilst even in these cases the land transfer process was sometimes lengthy. Furthermore, the impact on retail, housing, and social capital is only mitigated through outmigration of former military workers and their families. South Weymouth was seen as slow and discouraging, whilst Loring and Pease were seen as successful. The need for strong, swift and continuous leadership, alongside creativity and flexibility, government support and comprehensive planning documents, and incentives for business, were all identified as good practice.

²⁸ Greco, L. (2004) 'An Institutionalist Approach To Redundancies In The Chemical Industry', European Urban and Regional Studies 11: 141

²⁹ Schliemann, B.F. (2012) 'From Tank Trails to Technology Parks: the impact of base redevelopment for New England', *University of Massachusetts dissertation*



Shock	Response	Commentary on effectiveness
	foster planning and marketing efforts, offered tax incentives	
Closure of the Mitsubishi automotive plants in Lonsdale/Tonsley Park, southern Adelaide, South Australia 30	An assistance package of AU\$50million was announced for the region, with AU\$40 million to establish the Structural Adjustment Fund for South Australia (SAFSA), this being the largest response to the closure. The SAFSA included grants for firms willing to invest. A smaller aspect gave support to former workers, but no funds here were for retraining, as this was the State Government's responsibility.	SAFSA money was poorly targeted, with the fund not open to the whole state, and yet also not focused on areas of comparative advantage. Furthermore, the minimum investment of AU\$1million excluded smaller business involvement. In addition, most recipients did not achieve their job creation targets. In terms of the labour market, the state is said to now have a skills shortage, with very few former workers going into any form of training. This also meant former workers could not take advantage of these jobs.
Closure of a large employer in a Swedish 'company town' ³¹	The company involved, Korsnas, received a grant from the state for its regional development programme, as well as a tax break for the new production facility the company was building elsewhere.	Government cooperation was important in mitigating the closure, though there are no specifics in the paper on this. Moreover, close cooperation between management, the trade unions, and local government was essential.
	The process of closure involved the abandonment of attempts at preserving the plant on the part of all stakeholders, allowing early thoughts into what would happen during and post- closure.	Only 15 of the original 250 employees were unemployed when the plant closed, and even these were offered jobs in the company's other plants, but had refused.
		However, the closure did occur during a phase of economic expansion, so the effects were minimised by this. Indeed, alongside the mode of management, the wider economic state is said to be the most important precondition for success. Other important aspects are corporate social responsibility, and a positive cash flow.
Plant closures generally ³²	Government–funded Selective Financial Assistance was the response to economic shocks, involving funding in the form of/for: capital grants, employment grants, interest relief grants, rent grants, loans/share capital investment, marketing, product development, R&D, and miscellaneous (for activities not covered in the preceding categories).	Receipt of Selective Financial Assistance (SFA) by manufacturing firms in NI reduced the probability of plant closure by 15%-24%. Evidence appears to suggest that assistance mainly responded to existing businesses rather than creating employment in new businesses, implying that the programme was driven by businesses wanting to expand or survive, rather than new businesses wanting to set up, with the result that an increase of 19,600 employees, but with only 5,500 in new firms, with the paper questioning innovation in the sector as a result.
Business closures/ rationalisation ³³	An overarching 3-stage process has been identified, in which many responses across the EU fit: enterprise management, management of the re-employment of workers whose jobs are at risk, management of	One of the main lessons noted from the past 30 years is the need for actively engaging the social partners of companies undergoing restructuring, in anticipation of change at any level.
	the redevelopment of the region affected.	

³⁰ Beer, A., Thomas, H. and Bailey, D. (2008) 'A tale of two regions: comparative versus competitive approaches to economic restructuring', Policy Studies, Vol. 29, No. 3, 357-370

³³ European Commission (2010) European Restructuring Toolbox



³¹ Wigblad, R. (1995) 'Community Turnarounds in Declining Company Towns: A Restructuring Model', Journal of Socio-Economics, Vol. 24, Issue 3

³² Harris, R. Trainor, M. (2007) 'Impact of Government Intervention on Employment Change and Plant Closure in Northern Ireland, 1983-97', Regional Studies

Shock	Response	Commentary on effectiveness
	There are six types of responses, with different foci, as follows: organising redeployment based on regional strategies, developing an anticipative common understanding of economic trends, developing workers' employability, organising social and multi-actor dialogue as well as employers' collective actions aimed at securing employment, crisis management, organising job transition in a secure and dynamic way (identified as the most well-developed response across the EU).	are important to consider. For example these interactions can reinforce each other in successfully restructuring. Alternatively, if these interactions are not optimal for that particular shock, the response may not succeed.
Industry shocks		
Restructuring over the long term for Swansea due to economic shocks ³⁴	The first reaction to economic shock was for the Welsh Development Agency to encourage FDI into Swansea following the closure of extraction industries. This failed to be a long term solution, and so the Welsh Assembly Government developed a strategy to move the region up the value chain, focusing this time around on the knowledge economy.	Because FDI largely parachuted technical knowledge into Swansea, the foundations of the sectors FDI invested into were not endogenously-based, but instead based on assistance, including that by the Welsh Development Agency, which meant that the FDI could, and did, leave just as swiftly as it arrived. This meant the Swansea economy was not resilient to shocks, and suggests that endogenous knowledge and market-driven decisions are important to resilience, alongside a facilitating institutional environment.
Decline of the ship building industry in Gothenburg ³⁵	Issues around the workforce were "entirely decoupled from the redevelopment of the site", with immediate short-term responses to address people issues, and the long-term response to deal with the	Efforts targeted at people were deemed to be very effective, with very few redundancies, and an unemployment rise in Gothenburg from 2% to only 4% in the 1970s.
	site. Workforce responses were exemplified by collaboration, with Trade Unions in lead, but also involving the City, the employer (Swedeyard), the Labour Market Board, local businesses and others, with new work found elsewhere, a pension age reduction, yard mergers, and training schemes being the result.	Initial attempts to develop new businesses in similar types of industry were ineffective. Subsequent efforts targeted at place were seen as effective, in particular in terms of: creating a diversified economy, more people working in NA than did with the shipyards, education, and contribution to Western Sweden's economy. The only criticisms are that housing is for privileged only, and lack of emphasis on cultural activities.
	In the second half of the 1980s the knowledge economy vision started to be developed, with technical colleges set up and an IT cluster begun.	Good practice is emphasised particularly with regards to: the city's ownership, having a long-term process that is non-linear and beneficial for the whole city, acknowledging education, skills and innovation as being vital for success, and that economic success is delivered by businesses, so business leaders need to be at the core.
Shocks across a number of American	Responses were recorded in several cities: Detroit, Cleveland, Charlotte, Grand Forks, Hartford and Seattle.	The authors see no evidence that the traditional economic planning and development activities (marketing and promotion, tax subsidies, job training

³⁵ Cadell, C. (2008) 'Regeneration in European Cities: Making connections. Case study of Norra Alvstranden, Gothenburg (Sweden)', Joseph Rowntree Foundation



³⁴ Simmie, J. Martin, R. (2010) 'The economic resilience of regions: towards an evolutionary approach', Cambridge Journal of Regions, Economy and Society, 3, 27-43

Shock	Response	Commentary on effectiveness
cities, for a variety of reasons ³⁶	Organizational creation and restructuring were said to be frequent responses to economic shocks, as well as increased collaborative efforts and network creation. Regional collaboration was noted in Detroit, an activity much smaller before the city's 2000 downturn. Flooding and military base closure in Grand Forks were similarly said to have triggered substantial increases in collaboration regionally.	programmes), undertaken in each of the regions played a large role in determining the region's resistance to economic shocks, though they are careful to note that this doesn't mean they were not effective.
		The strongest evidence of an impact from policy intervention were efforts in Grand Forks to support manufacturers, which the authors suggest might have led to increased specialisation.
		However, the paper sets out clearly the authors' belief that policies enacted after shocks are likely to be of little value to regions' resilience to shocks, as resilience measures are long-term, setting out their belief that policymakers should plan ahead to decrease vulnerability in the first place.
Local/regional respon	nses to macro-shocks/recession	
Shocks warranting task force response in the North East ³⁷	Some task forces in the North East have been reactive and regenerative, with others proactive and developmental, with the former focusing on the shorter term, and the latter looking more long term. Some task forces have only been triggered by major events or political pressure. These are not mutually exclusive, with models evolving as economic development issues are better understood.	There is some criticism noted of task forces being too reactive, tokenistic, ad hoc, and too narrow in scope, though evaluation evidence is said to be lacking, that might say how effective they are. They are, however, noted as having value for getting relevant parties 'around the table' on issues, and for their coordination and mobilisation role.
The post-2001 telecom bust, and the macroeconomic shock of 2008 onwards, in Ontario ³⁸	 Government responses were targeted at specific places: In Ottawa, the Economic Generator Initiative was set up, tasked with encouraging economic growth, establishing flagship initiatives, and led by public and private leaders In Waterloo, the response included setting up a Prosperity Council, in 2003, representing 3,000 businesses, to create a regional vision for development, a stronger private sector ability to use emerging technology, and the mobilisation of key parts of the business community, civic organisations, and regional 	Ottawa's efforts were identified as demonstrating bad practice, with fragmentation of networks and a lack of clear civic champions, and of integration between economic and labour market initiatives. Waterloo, on the other hand, was identified as exemplifying good practice, helped by a more diverse industrial base to begin with, its capacity to go from old technologies to new ones, engaged civic organisations, mechanisms for strategic management and regional governance, and a high degree of interaction across public and private sectors.

³⁸ Wolfe, D.A. (2010) 'The strategic management of core cities: path dependence and economic adjustment in resilient regions', Cambridge Journal of Regions, Economy and Society



³⁶ Hill, E. St. Clair, T. Wial, H. Wolman, H. Atkins, P. Blumenthal, P. Ficenec, S. Friedhoff, A. (2011) 'Economic Shocks and Regional Economic Resilience', *Building Resilient Regions: Urban and Regional Policy and Its Effects*

³⁷ Pike, A. (2002) 'Task forces and the organisation of economic development: the case of the North East region of England', *Environment and Planning C: Government and Policy*, Volume 20, pages 717-739

Shock	Response	Commentary on effectiveness
	research assets.	
Nonspecific lock-ins of the regional industrial base ³⁹	Put forward here is a model for the 'learning region'; a model serving the avoidance of path dependency, with the region defined as one with a broad set of innovation-related regional actors working together on a number of organisational initiatives to increase coordination, an ability to respond to change, and on fostering a knowledge-laden society.	'Negative path dependency' of two regions, Mecklenburg-Vorpommern in Germany, dominated by the shipbuilding industry, and Daegu in South Korea, dominated by the textile industry, can be understood in terms of their departure from the 'learning region' model, with neither identifying lock-ins or responding positively to exogenous change.
Late 2000/10s recession in the UK at national, regional and local level ⁴⁰	Up to £20 billion worth of short-term initiatives were launched under the 'Real Help Now' brand by BIS, plus further regionally-tailored measures developed with/delivered by the RDAs and Business Link. Measures related to: improving businesses' access to finance; support for the automotive sector; and indirect support at the regional level.	By the end of 2009, only £3billion of the £20billion nationally had been spent, with take-up lower than expected, which the National Audit Office put down to risk aversion on the part of the government, poor market knowledge, poor communication and unrealistic targets. The vehicle scrappage scheme and Enterprise Finance Guarantee Scheme were notable successes. Schemes were not generally as effective as they could have been because they took so long to
	However, the focus is on the West Midlands Taskforce (WMTF), which first met in December 2008. The activities of the task force included: intelligence gathering and analysis to inform interventions; enhanced business support services; development and delivery of a dedicated graduate internship scheme; support for independent retailers in market towns; and regional communication campaigns including the launch of a one-stop website for business advice.	get up and running, AWM was the first to start its Transition loan fund, safeguarding 2,500 jobs, at a cost of £4,400 per job. Such was its experience AWM subsequently administered the fund for the East Midlands too. The region's Automotive Response Programme (ARP) safeguarded 2,930 and created 410, with a cost per job of £1,350, and prevented a hollowing out of jobs and capacity in the sector. Its Graduate Internship Programme was also deemed a success, helped
	Measures that local authorities can use come under three main headings: changing corporate behaviour, providing basic information, and complex, targeted interventions. The paper gives two, brief, specific examples - the creation of a municipal bank by Essex County Council and support provided to a management buy-out by Northumberland County Council.	by credibility of the partners involved, and their ability to get things to happ quickly. At the local level, however, many LAs lacked strategic decision making, wire RDAs taking on this role. Generally LA measures were low-risk and sensithough being more ambitious as in the Essex and Northumberland cases thave a high impact, if they are not hindered here by their limited finances.
Response to disaster	s	
Explosion at the Buncefield Oil Depot affecting the	A Recovery Group was set up to provide strategic leadership of the response and oversee an Infrastructure Task Force, Business Recovery Task Force and the Community Task Force	Overall, the emergency response was well-regarded, despite a lack of information on access, and a perception of insufficient support from central government and oil companies for disaster fund.
Maylands Business Park in Hemel	The Business Recovery Task Force was to provide immediate support to businesses and employees, overseeing development and	The business recovery support was not well received, for a variety of reasons, including a lack of information for businesses, and lack of a proactive approach

⁴⁰ Berkeley, N. Jarvis, D. Bailey, D. (2011) Chapter 9 (p 168-182) in 'The Recession and Beyond: Local and Regional responses to the Downturn' by Bailey, D and C Chapain, eds.



³⁹ Hassink, R. (2005) 'How to Unlock Regional Economies from Path Dependency? From Learning Region to Learning Cluster', European Planning Studies

Shock	Response	Commentary on effectiveness
Hempstead and further afield 41	implementation of a regeneration strategy for the business community linked to the LA vision; maintaining proactive communications to encourage cooperation and business involvement.	from the LA in offering assistance, a first meeting that included residents and businesses, with different views between them, and a feeling that anything ove and above the financial assistance businesses need is simply a PR exercise.
	Assistance included that from JC Plus and CAB, a Buncefield Bus touring the area to offer advice to those whose employment had been affected, advice by members of The Bridge (LA's business and training support centre), and assistance for larger scale redundancies from Herts Careers Service, Nextstep, JC Plus, and Dacorum Learning Forum.	A clear gap in the financial support available was also identified, with it noted that emergency support has to include flexible financial assistance from the outset, with the suggestion of a fund providing interim compensation non-bureaucratically, to address business needs.

 $^{^{41}}$ SQW (2006) The Buncefield Oil Depot Incident Economic and Business Confidence Impact Study

