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Bounce back or move on: Regional resilience and economic development planning

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ABSTRACT

While psychologists and ecologists have identified many factors that increase the odds of resilience in a person or an ecosystem, economic development officials and planning scholars do not yet have a firm grasp on how economic development planning relates to regional resilience. This study explores how two regions – Buffalo, New York and Cleveland, Ohio – have adapted and responded to deindustrialization using economic development. Interviews were conducted with past and present planning and economic development leaders and historical and current economic development plans were analyzed in order to increase our understanding of how regions respond to challenges, how economic development planning shapes these responses, and how both economic development planning and the larger response relate to adaptive resilience in distressed regions.

Introduction

Just as people may be resilient, so too may places. And just as people may *not* be resilient, so too may metropolitan regions and their core cities. In recent years, numerous scholars have begun to grapple with the question of what makes a region resilient. While psychologists and ecologists have made great strides to identify the factors that increase the odds of resilience in a person or an ecosystem confronting a problem, economic development officials and planning scholars do not yet have a firm grasp on the factors that affect a region's resilience in response to a given challenge. In this study, the focus is on deindustrialization and how two regions have adapted and responded to this challenge using economic development planning.

Frequently mistaken for a cyclical recession or temporary economic downturn, deindustrialization unfolds over time, often coinciding with population out-migration, economic restructuring and widespread employment losses. Regional responses to the challenge of deindustrialization have varied in both their approaches and in their outcomes. While some regions have successfully weathered the trend, others have fought, and in some cases continue to fight, diligently to reverse or curtail its negative effects. Such divergent processes and outcomes highlight the importance of using case studies to understand what features of a region, including regional asset bases, modes of governance, civic capacity, leadership, and various external factors contribute to decline or facilitate recovery. Theories of resilience from an array of disciplines provide a conceptual framework through which these questions can be answered. Using resilience as a lens, this research seeks to apply established theory and methods from the resilience literature to the question of deindustrialization, allowing for the emergence of a more specific understanding of how and why regions varied in their abilities to respond to this challenge.

In this study, I examine two comparable United States metropolitan regions – Buffalo, New York and Cleveland, Ohio – that confronted the challenge of deindustrialization beginning in the late 1970s. In both regions, I conducted interviews with past and present planning and economic development leaders and analyzed historical and current economic development plans in order to compare how plans have changed, priorities have shifted, and the tone of both have adjusted to the new realities of the post-industrial economy. Using the analytical framework of resilience, I then conclude with a discussion of adaptive resilience vis-à-vis these two case study regions. The goal of this research is to increase our understanding of how regions respond to challenges, how economic development planning shapes these responses, and how both economic development planning and the larger response relate to adaptive resilience in distressed regions.

Resilience, regions and adaptation

Though psychologists have long used resilience as a way to describe an individual's response to a specific challenge or traumatic event, the application of resilience to places and structures has only lately been explored (Bonanno, 2004; Kaplan, 1999). Recent investigations of urban and regional resilience have found that cities and regions tend to be resilient in the face of natural disasters;

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meaning that they often revert back to their pre-disaster state as measured by tangible indicators like population and jobs, or the slightly more ambiguous concepts of resumed economic activity or regional traffic flow (Vale & Campanella, 2005). In all, the literature says much about resilience in the face of sudden or episodic disruptions and comparatively little about the ability of places to recover in the face of other types of disasters, including the longer-term stress of deindustrialization (Berke & Campanella, 2006). Given that resilience remains such an ambiguous, or *fuzzy*, concept, further exploration seems warranted (Markusen, 1999; for more on resilience as it relates to fuzziness, see Pendall, Foster, & Cowell, 2010).

The concept of resilience has been analyzed and defined differently by scholars across a variety of disciplines, including ecology, psychology, economics, disaster studies, political science and assorted other fields. We learn from ecologists and engineers that there are two main types of resilience: *ecological resilience*, which describes instances when some sort of disruption pushes a system from one equilibrium to another; and *engineering resilience*, which pertains to instances when a system returns to its presumed steady-state after a disruption, as measured in this case by indicators like water quality and the rate of return of certain species (Berkes & Folke, 1998, 12). It is this second definition that is utilized most often by fields that are associated with urban planning because it emphasizes the recovery of people and places in the wake of some specific shock or prolonged stress (Pickett, Cadenasso, & Grove, 2004; Vale & Campanella, 2005).

In the end though, none of these traditional conceptualizations of resilience are appropriate for the type of research being conducted here. When regional actors develop a response to a long-term shock like deindustrialization, they are not looking to achieve (or maintain) a new equilibrium, nor are they looking to simply 'bounce back' to their pre-challenge state, especially if that state was less than desirable to begin with. More importantly, a 'return to normal' in the face of global restructuring would not generally be possible anyway. Both the ecological view and the engineering view are therefore imperfect in that they are overly concerned with how fast or how easily a region 'bounces back' or recovers from a particular challenge. Such frameworks say nothing about the tradeoffs associated with 'bouncing back' or adjusting to a new sub-optimal equilibrium. Nor do they say anything about how regional actors might prepare themselves to deal with future problems or might learn from the mistakes they have made in response to a given challenge.

One way to incorporate the ideas of regional adaptation, preparation or experiential learning and to help clarify our discussion of resilience is to think about an individual region as a complex adaptive system. Rather than merely striving for a return to normalcy or a resumption of pre-challenge behaviors or outcomes, an adaptive system is one that has the ability to change or adapt in response to stresses and strains (Carpenter, Westley, & Turner, 2005). In such systems, resilience is not related to equilibrium, a return to 'normal', or even to resilient outcomes; it is instead a *"dynamic attribute associated with a process of continual development"* (Pendall et al., 2010). In Buffalo and Cleveland, where decades of restructuring have eroded any sense of 'normalcy', it is this adaptive systems perspective of resilience that is most applicable.

Adaptive resilience is most often explained through the use of a 'figure 8' diagram, which depicts the four phases of a region's adaptive cycle as it adjusts to internal and external challenges (Holling, Gunderson, & Peterson, 2002). Each of the four phases – conservation, release, reorganization and exploitation – relates to the process of adaptive resilience, exhibited by the system's susceptibility to stresses or shocks (see Fig. 1). As Holling et al. (2002) describe in their *panarchy* model of adaptive resilience, systems, and presumably regions, cycle through these four stages over time. Any given region will experience varying levels of resilience, depending on where it is within the four-phase cycle. Each phase reflects the characteristics of the system or region and describes the level and direction of resilience at a given moment in time.

Though each quadrant denotes a unique phase in the adaptive cycle, the boundaries between each phase are not always easily distinguishable. Part of this uncertainty is due to the fact that the figure 8 model is actually multi-scalar, whereby a series of nested adaptive cycles have cross-scale interactions. In this nested model, smaller, faster-cycling systems simultaneously act upon larger, slower-cycling systems and vice versa. The smaller systems enact change through a 'revolt' function, which may reverberate upward through larger systems during times of low resilience. The slower-cycling, but larger scale systems sometimes temper these faster-moving 'revolts' through a 'remember' function. In the case of a deindustrializing region confronting economic restructuring, the smaller, faster-cycling systems might include community activists, new upstart companies, or a progressive local leader departing from the norm. The larger, slower-moving systems might include longtime business leaders, the political establishment, or restrictive local policies. (For more on nested adaptive cycles, see Holling et al., 2002, 72–76).

Though it may sometimes be difficult to pinpoint a system or region's position within the cycle, each of the four phases is distinctive because a system's resilience levels differ in each phase, as do its stability and certainty. Using the example of a hypothetical Midwestern industrial region during the 1970s, it seems fitting to start with the 'conservation' phase. During this phase of the adaptive cycle, one might expect to see resources accumulate, uncertainty decrease, and rigidity increase within the system as many of the older industries reach maturity. With this loss of flexibility would also come diminishing resilience and increasing vulnerability to an external shock or stress. In many of these regions, that stress took the shape of economic restructuring, a process that pushed many regions from conservation to 'release'. Akin to Schumpeter (1975) process of creative destruction, the release phase was often marked by collapse and uncertainty, as this hypothetical region grappled with the loss of jobs, the closure of firms, and the obsolescence of technologies. Resilience during this period would likely be subsequently low, but would increase as regional leaders began to take stock of the problem and weighed their options. As the region or system began to experiment and reorganize in response to the stress of economic restructuring, it might then enter into the 'reorganization' phase. It is during the reorganization phase, when innovative ideas are developed and initial adaptations occur, that resilience and uncertainty are at their highest levels. Resilience remains high but begins to decrease during the 'exploitation' phase, which is when innovative ideas transform into opportunities that are then seized as new businesses grow. The cycle is poised to begin anew when these innovative opportunities mature and rigidity again takes hold.

To move beyond the hypothetical and to gauge an actual region's movement through the adaptive cycle and to understand its adaptive resilience is slightly more complex. To understand a region's adaptive resilience, it is essential to ask whether its leaders have responded to economic restructuring in a way that improves the chances for a healthy region in the long run. Rather than saying that a region is or is not resilient, the adaptive system model tells us that *resilience levels vary depending on how the region adapts to changes and cycles through these four phases*. In other words, have they taken action towards turning the proverbial 'corner' or moving from the collapse and uncertainty of the release phase into the innovative restructuring we see in the release phase? In doing so, have regional leaders drawn upon the strengths of the region or have they increased divisiveness? Do they continue to learn from their past mistakes and from their successes? Have they used this information