



UNDERSTANDING RESILIENCE THROUGH REGIONAL RESPONSES TO ECONOMIC RESTRUCTURING

by Margaret Murphy Cowell

This thesis/dissertation document has been electronically approved by the following individuals:

Pendall, Rolf J. (Chairperson)

Christopherson, Susan M (Minor Member)

Donaghy, Kieran Patrick (Minor Member)

UNDERSTANDING RESILIENCE THROUGH REGIONAL RESPONSES TO
ECONOMIC RESTRUCTURING

A Dissertation

Presented to the Faculty of the Graduate School
of Cornell University

In Partial Fulfillment of the Requirements for the Degree of
Doctor of Philosophy

by

Margaret Murphy Cowell

August 2010

© 2010 Margaret Murphy Cowell

UNDERSTANDING RESILIENCE THROUGH REGIONAL RESPONSES TO ECONOMIC RESTRUCTURING

Margaret Murphy Cowell, Ph. D.

Cornell University 2010

Borrowing from the resilience literature and utilizing a typology developed by Markusen and Carlson in 1988, this study will begin to match distinctive responses to deindustrialization with specific economic development strategies in order to better understand how certain Rust Belt regions fared in light of their given responses and the various strategies they employed. In their article, "Bowing Out, Bidding Down, and Betting on the Basics: Midwestern Responses to Deindustrialization in the 1980s", Markusen and Carlson (1988) describe three types of responses to economic restructuring. The "Bowing Out" approach abandoned the idea of manufacturing reliance, focusing economic development efforts instead on the attraction and growth of service sector employment opportunities. The "Bidding Down" approach focused on curtailing manufacturing losses by decreasing the cost of doing business in a given region. "Betting on the Basics" describes economic development strategies that targeted existing heavy industry, emphasizing the retention and expansion of firms already in the area. Also included in this study is a fourth type of strategy that I call "Sharing the Wealth", which was proposed by Clavel and Kleniewski (1990) and describes strategies that embraced growth in the service sector and worked to incorporate linkage policies for the redistribution of related benefits in that sector.

In this study, regional responses in eight metropolitan areas of the United States Rust Belt region are analyzed through the lens of adaptive resilience. The regional responses are subsequently categorized based upon current economic and demographic data, data collected through extensive interviews with former stakeholders, and archival research utilizing planning documents. In order to gain a diverse and robust understanding of each region's response, interviews were conducted with leaders from the public, private and non-profit sectors, and leaders representing offices with urban, suburban or regional interests. In the end, my research finds that those regions that 'Bet on the Basics' were less likely to exhibit adaptive resilience than those that chose to 'Bow Out.' The research also indicates that timing matters; many of the regions that responded swiftly did exhibit adaptive resilience, while those who took more time to respond generally did not.

BIOGRAPHICAL SKETCH

Margaret Murphy Cowell was born in Syracuse, New York on September 11, 1980. She is the daughter of David and Mary-Jane Cowell of Oswego, New York. She received her Bachelor of Arts in Urban Studies from Brown University in 2002, Master of Urban Planning from the State University of New York at Buffalo in 2004, and Doctorate in City and Regional Planning from Cornell University in 2010. Between 2004 and 2006, Ms. Cowell worked as an Assistant Regional Economist at the Buffalo Branch of the Federal Reserve Bank of New York.

ACKNOWLEDGMENTS

I have been fortunate to have the endless support of my family and many friends during these last four years. For that, I am eternally grateful. First and foremost, I would like to thank my parents, Dave and Mary-Jane; my grandmother, Tiz; my sister, Molly; and my brother, David. Your support, encouragement, and patience (even across continents) have been invaluable to me both now and forever. I also want to thank my good friend and colleague, Sara O'Neill-Kohl, for her incredible advice, encouragement, style and grace. Thanks also to Joseph Murray, who kept me laughing as I inched towards the finish line. And to Stephanie, Gina, Adam, and Jenny, thanks so much for your friendship and good energies sent from both near and far.

This research would not have been possible without the support (financial and otherwise) of numerous organizations. Thank you to the National Association of Counties for their generous financial backing. Thanks also to all of the wonderful scholars I have met as a member of the MacArthur Foundation's research network on Building Resilient Regions. The fantastic research and professional guidance provided by network members and the financial support provided by the MacArthur Foundation were immensely helpful to me as I conducted this research. Thanks are also due to the faculty and staff in the Department of City and Regional Planning at Cornell University for their generous financial and administrative support throughout this process.

And finally, I would like to thank the professors who have forever influenced my research and my teaching. First, special thanks to Rolf Pendall, who gave

me the courage to research and write about otherwise forgotten places. Thanks also to Susan Christopherson and Kieran Donaghy, two prolific scholars and mentors whose work has greatly inspired me and will undoubtedly continue to do so in the future. Thanks also to Kathryn Foster, a wonderful scholar, mentor, and friend.

Though many have supported me, any mistakes made here are mine alone. The views expressed in this dissertation are solely mine and should not be ascribed to the people whose assistance is acknowledged above or to the organizations that have supported this research.

TABLE OF CONTENTS

BIOGRAPHICAL SKETCH	iii
ACKNOWLEDGEMENTS	iv
LIST OF FIGURES	viii
LIST OF TABLES	ix
CHAPTER 1 – INTRODUCTION	1
Motivations	2
Road Map to the Dissertation	5
CHAPTER 2 – CONCEPTUAL FRAMEWORK	9
Introduction	9
The United States Rust Belt	10
Deindustrialization	11
Global Forces with Regional and Local Implications	17
Resilience and Regions	20
The Limitations of Ecological and Engineering Resilience	21
Adaptive Resilience	23
Responses and ‘Good Outcomes’	28
Economic Development: Planning, Processes, and Actors	31
Typologizing Economic Development Responses	36
CHAPTER 3 – QUESTIONS, DATA, HYPOTHESES, AND METHODS	42
Research Questions	42
Data	45
Hypotheses	48
Methods	50
Limitations	53
CHAPTER 4 – REGIONAL SETTING	56
Eight Distinct Metropolitan Regions	58
Mapping Common Traits and Characteristics	63
Adaptive Resilience: Response and Recovery	66
Conclusion	72
CHAPTER 5 – DETROIT: THE PERILS OF ‘BETTING ON THE BASICS’	74
Detroit’s Economy and Society	75
Stakeholders	80
Efforts to Respond	84
‘Betting on the Basics’	87
‘Bidding Down’	89
‘Bowing Out’	91
‘Sharing the Wealth’	93
Gauging Adaptive Resilience (or the Perils of ‘Betting on the Basics’)	95
Strong Activist Subculture	98

Growing Importance of Quality of Life, Societal Needs	101
Workforce Development Efforts	104
Significance of Findings	107
CHAPTER 6 – OTHER ‘BASIC BETTERS’ – MILWAUKEE, BUFFALO, AND CLEVELAND	110
The Regions – Milwaukee, Buffalo, and Cleveland	111
Milwaukee	112
Buffalo	117
Cleveland	124
Conclusions	129
Common Regional Characteristics	130
Lessons Learned	132
CHAPTER 7 – TURNING THE CORNER – INDIANAPOLIS, CINCINNATI, COLUMBUS, AND PITTSBURGH	134
The Regions – Indianapolis, Cincinnati, Columbus, and Pittsburgh	135
Indianapolis	136
Cincinnati	141
Columbus	146
Pittsburgh	151
Conclusions	156
Common Regional Characteristics	156
Lessons Learned	158
CHAPTER 8 – CONCLUSIONS – TO REINFORCE HISTORY OR TURN THE CORNER?	162
Revisiting Hypothesis 1	163
Revisiting Hypothesis 2	166
Remaining Questions	

LIST OF FIGURES

Figure 1 – The Rust Belt Region with Selected Metropolitan Regions	11
Figure 2 – Four-phase Cycle of System Adaptation and Change	25
Figure 3 – National Employment by Subsector	65
Figure 4 – City of Detroit and Metropolitan Detroit Population, 1900 – 2000	77

LIST OF TABLES

Table 1 – Markusen and Carlson’s (1988) Typology of Responses and Strategies	40
Table 2 – Questions, Data, and Methods	46
Table 3 – Regions by Manufacturing Dependence and Sector	59
Table 4 – Selected Characteristics of Eight Case Study Regions in the Response Period (1969 – 1989)	67
Table 5 - Selected Characteristics of Eight Case Study Regions in the Recovery Period (1989 - 2000)	71
Table 6 – Major Employers in Detroit MSA, 2007	77
Table 7 – Occupational Employment and Wages by Major Occupational Group, United States and Detroit-Livonia-Dearborn Metropolitan Area, May 2007 (BLS 2008)	78
Table 8 – Interviewee Responses by Ideological Approach	87
Table 9 – Selected Characteristics of Regional Responses to Deindustrialization	163

CHAPTER 1

Introduction

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 understanding what features of a region, including regional asset bases, modes of governance, civic capacity, leadership, and 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 regional decline, allowing for the emergence of a more specific understanding of how and why regions varied in their abilities to respond to deindustrialization.

Broadly speaking, the main purpose of the research is to increase our collective understanding of the meaning of resilience in regions that have experienced long-term industrial decline, and to do so by examining the efficacy of various responses to this trend. Focusing specifically on America's Rust Belt region, the research will seek to uncover how eight metropolitan regions in this particular area fared in light of long-term and increasingly

pervasive deindustrialization. In order to do so, the research has been divided into two main parts: a single case study of Detroit, followed by an eight-region examination of other metropolitan regions in the U.S. Rust Belt.

Motivations

My unwavering interest in the Rust Belt region and its problems stems from a parallel interest in understanding how regions operate as both economic and governmental systems. A recent surge in the regional literature suggests that I am not alone; many researchers are interested in issues of economic development, government fiscal health, environmental quality, traffic congestion, affordable housing, workforce quality, and ensuring access to opportunity as they pertain to supra-local governments. However, a basic review of the literature suggests that there is little agreement among scholars about how regions recover from persistent problems.

My interest in regional responses to economic challenges began long before this particular body of research commenced; although I might not have always known it, I have been thinking about places and economies for decades. I spent most of childhood in a very small city in Upstate New York. If you have heard of Oswego, NY, it is probably only because of its record snow fall or maybe because of the small college that is located there: The State University of New York (SUNY) at Oswego. The city is less well-known for its main economic driver, a two-unit nuclear power plant called Nine Mile Point Nuclear Station. In 2006, when both units were being considered for re-licensing, there was great uncertainty amongst Oswegonians; local newspapers covered the re-licensing extensively and discussions surrounding this uncertainty were a

main topic of conversation at many a retiree coffee klatch. Twenty-year license extensions were ultimately granted to both units but discussions now have turned to whether or not a third power plant will gain approval. The fate of the city and the surrounding employment-shed, areas that have suffered greatly during recent economic downturns, now rests in the continued success of the two original power plants and approval of this third plant in the near future. Oswegonians have long known that jobs, taxes, and housing prices are all inter-twined with the fate of the nuclear plant. Just like the leaders interviewed for this study, residents of Oswego find it difficult to ignore the possibility that the local economy will suffer greatly if the economic base is compromised. Though we do not yet know the fate of this third power plant (nor the long-term fate of the city of Oswego), I can only hope that leaders are preparing for both the best and the worst.

What also led me to study the effects of economic restructuring on shrinking regions was the research training I received while working at the Buffalo Branch of the Federal Reserve Bank of New York. Having completed my master's degree at the State University of New York at Buffalo, I started my time at the Fed with a keen awareness of the challenges facing mid-sized northeastern cities in the post-industrial era. This knowledge, coupled with the regional economics training I received during this period of employment, led me to a path of inquiry that focuses broadly on the performance and sustainability of regions, especially during periods of transition.

While the challenges I observed in Oswego and the disappointing projections I estimated in Buffalo remain largely in the present or very near future, the

difficulties discussed in this study unfolded many years ago. Nevertheless, my experiences in both situations – either watching my beloved hometown await the decisions of the U.S. Nuclear Regulatory Commission or estimating just how badly the Buffalo economy would perform - seem oddly reminiscent of the historical tensions I describe in my dissertation research outlined below.

Rather than looking forward, this body of research tends to look back in history to examine industrial Midwestern metropolitan regions as they struggled with the economic restructuring that began to unravel regional economies during the late 1970s and early 1980s. Given the historically-unprecedented nature of this economic challenge, making decisions about how to respond were often quite difficult for regional leaders. Using a combination of both economic data and qualitative data collected from interviews with former stakeholders in each region, this research identifies how local reactions to this prolonged economic downturn were fashioned, whom they involved, and in what ways they contributed to or detracted from regional resilience in these metropolitan regions.

Though the broader goal of this research has always been to make relevant and increase our understanding of why some regions perform better than others in the wake of a crisis, I had little idea just how applicable this research would become. When I began my dissertation research in early 2008, the United States economy was performing relatively well and many regions across the country were reaping the benefits of that solid performance. A short while later, particularly in the fall of 2008, metropolitan areas began to struggle as our national economy experienced a marked deceleration of economic

activity. Suddenly, the difficulties that places like Detroit and Pittsburgh experienced in the 1970s and 1980s became all the more relevant today as regions now grapple with their own problems of widespread unemployment, paralyzing foreclosures and general economic and fiscal instability. Though this recession is not likely to play out in exactly the same way as those that occurred in the early 1980s, there are still many valuable lessons to be learned about how regions responded to these same challenges nearly three decades ago.

Road Map to the Dissertation

The outline of the dissertation is as follows. Here, in Chapter 1, I provide you with a brief introduction to the dissertation and a short discussion of the motivations and goals behind this body of research. In Chapter 2, I introduce you to, or reacquaint you with, the United States Rust Belt, as well as the concepts of resilience, economic development and deindustrialization. It is here that I also begin to make connections between these concepts, mainly by utilizing theories of adaptive resilience as well as two economic development typologies created during the late-1980s and early-1990s.

In Chapter 3, I propose three main research questions, all of which urge us to consider how decision makers affected regional outcomes, especially in Rust Belt regions during the 1970s and 1980s. These three questions serve as the guiding framework for this research, moving us towards a better understanding of regions, regional leadership and economic development. In Chapter 3, I also provide an introduction to the qualitative and quantitative data collected for this study and the methods by which they have been interpreted and

analyzed. Chapter 3 also includes two main hypotheses, which introduce certain arguments about the relationship between economic development responses and resilience in the case study regions.

The eight regions included in this research – Buffalo, Cincinnati, Cleveland, Columbus, Detroit, Indianapolis, Milwaukee, and Pittsburgh - are briefly described in Chapter 4. This chapter also includes fundamental analyses of each region's economic base, as well as their recent economic, social and political histories. Along with basic quantitative data on population, employment, income and poverty, these economic histories help to identify response and recovery resilience in the eight regions.

The bulk of the findings are presented in Chapter 5, 6, and 7. I begin first with a deep case study of Detroit in Chapter 5. Because Detroit has faced such incredible challenges in the past few decades, the region is given its own chapter and all the attention that a single case study affords. The case study includes a thorough discussion of the Detroit region's economy and society, relevant stakeholders, associated economic development response efforts, and a lengthy analysis of adaptive resilience. Findings from the Detroit case informed later work in the other case study regions presented in Chapters 6 and 7.

The case study regions highlighted in Chapter 6 responded to deindustrialization in much the same way that Detroit did – by largely focusing their economic development efforts on the retention of heavy manufacturing. The specific responses crafted in Milwaukee, Buffalo, and Cleveland are

outlined and then contrasted. Common regional characteristics and lessons learned from these regions are also presented.

In stark contrast, actors in the case study regions discussed in Chapter 7 chose a different approach with most opting to move away from manufacturing and towards a more diverse industrial base. These four regions – namely, Indianapolis, Cincinnati, Columbus and Pittsburgh – took steps to move beyond what was easiest or what was familiar in hopes of achieving a better, more resilient outcome. As in Chapter 6, this chapter concludes by comparing the regional outcomes and by presenting lessons we might take away from these regional responses.

Final conclusions about the resilience of regions in the face of deindustrialization are presented in Chapter 8. In order to do this, I first revisit, and then discuss, the hypotheses presented in Chapter 3. I end by proposing a series of remaining questions about the benefits of certain economic development response types, the preconditions necessary for certain responses, and the usefulness of adaptive resilience as a framing concept for studies of regional economic development.

In the end, this research represents one researcher's honest attempt to answer fundamental questions about regional responses to deindustrialization. Like any good research project, this body of research answers a few questions and raises many more. As a young scholar, I take comfort in the fact that we still have more to learn about regions, economic development and resilience and hope to further engage in research that answers these remaining

questions. Until then, let this body of research serve as a reminder of all that we knew, all that we now know, and all that remains to be uncovered.

CHAPTER 2

Conceptual Framework

Introduction

In the late 1970s and early 1980s, metropolitan areas throughout the Midwestern Rust Belt region of the United States struggled with the effects of deindustrialization, watching as their economic bases shifted from manufacturing-intensive to more services-based economies. This transition was difficult for most Rust Belt regions because it generally meant simultaneously confronting population outmigration, above average unemployment, and diminished revenue. Further difficulty stemmed from dwindling and often uncertain federal support for the very economic development initiatives that would ostensibly make this transition easier. Regional responses to these challenges varied greatly; some regions successfully re-imagined their economies while others faltered or struggled against the changes taking shape.

In an effort to improve our understanding of economic restructuring and regional change, I begin this chapter by briefly exploring the topics of deindustrialization and resilience, particularly as they pertain to affected metropolitan areas of the United States. I then discuss economic development responses in the wake of deindustrialization and follow with a discussion of typologies that may be helpful in sorting through these responses and in relating them back to the concept of regional resilience.

The United States Rust Belt

The United States Rust Belt includes the industrialized portions of the states that make up the Great Lakes region. When people refer to the Rust Belt, they are generally referring to the entire states of Michigan and Ohio, northern and central Indiana, northern Illinois, southern Wisconsin and the western portions of Pennsylvania and New York. The term Rust Belt emerged as a counterpoint to the Sunbelt: the southern, more prosperous area of the United States that stretches from Florida and Georgia to the southern portion of California.

In this study, eight large metropolitan regions found within the Rust Belt are examined: Buffalo, Cincinnati, Cleveland, Columbus, Detroit, Indianapolis, Milwaukee, and Pittsburgh (See Figure 1). These regions have been selected because of their size: with the exception of Chicago, these eight regions were the only Rust Belt regions with populations greater than 1 million in 1980. Because of its extremely large size and the complexity of its response to deindustrialization, the Chicago region has been excluded from this study. The remaining eight regions vary significantly in terms of demographic composition, political leanings, and present-day economic bases, however all are located within the Rust Belt, have storied manufacturing-intensive pasts, and have weathered significant challenges during the late-20th century.

Once known for their manufacturing and production prowess, these Rust Belt regions now conjure up images of rusted machinery, padlocked gates and abandoned industrial compounds. Much of this change occurred during the 1970s and 1980s when the Rust Belt region experienced widespread economic restructuring – often called deindustrialization - that changed the

face of regional economies the world over. Metropolitan areas of the Rust Belt, for the most part, experienced devastating losses in the form of disappearing jobs, population outmigration and dwindling tax revenue. As a whole, the region saw 23.6% of its manufacturing employment disappear during this time period (Kahn 1997).

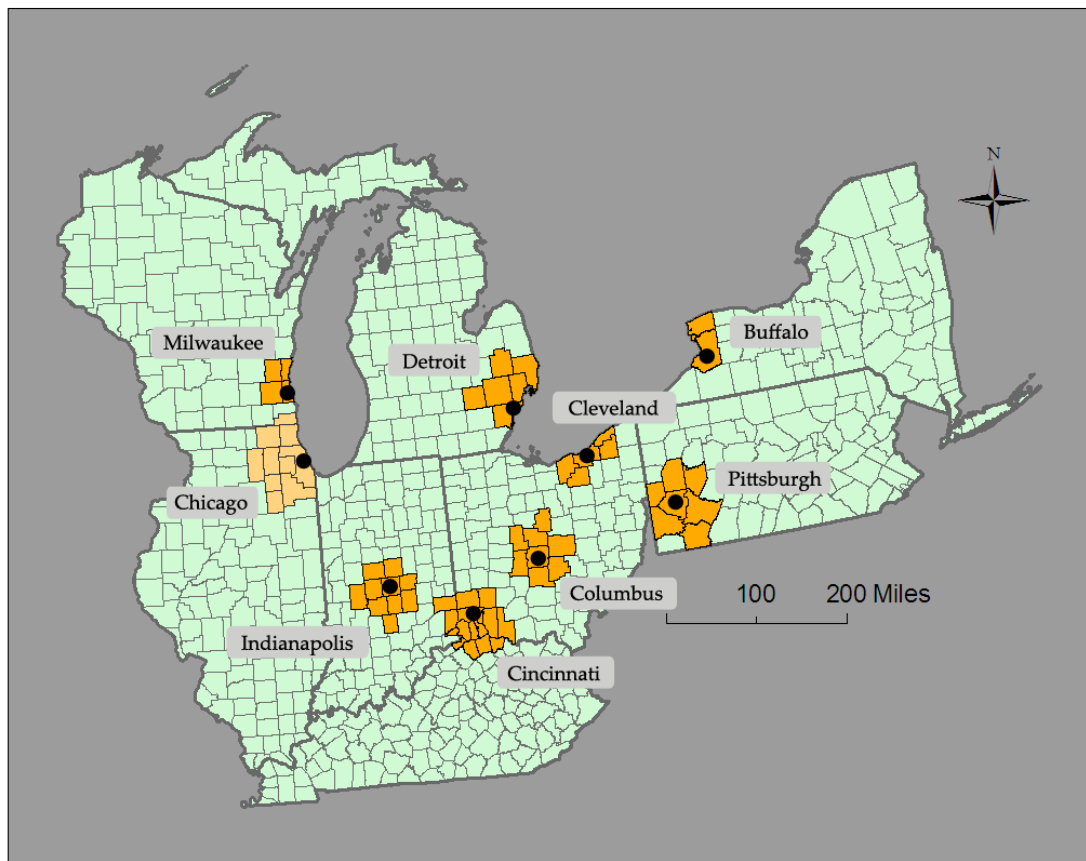


Figure 1 - The Rust Belt Region with Selected Metropolitan Regions

Deindustrialization

In order to understand how deindustrialization affected the eight case study regions, it is useful to first recognize the origins and complexities of the deindustrialization trend. Part of the difficulty in understanding

deindustrialization stems from the fact that it's not often used by researchers today; in the United States, deindustrialization typically refers to the changes seen in the economy and in broader society during the late-1970s and early-1980s. The term is a historical construct, meaning that it happened during a certain point in history and was a construct of larger local and global economic processes, including trade liberalization and a growing spatial division of labor.

The term deindustrialization is also slightly confusing because it is a misnomer. Deindustrialization in the Rust Belt in no way resulted in *no industry*; instead, deindustrialization was part of a major economic restructuring that would change the economic landscape and industrial composition of these regions forever. Global restructuring of manufacturing often meant that many corporate headquarters positions would stay put but lower wage jobs were outsourced to less expensive areas of the world. In places like the Rust Belt, these higher wage headquarter positions remained an important part of the regional economy but represented a comparatively small portion of total regional employment.

In most Rust Belt regions, deindustrialization caused a sharp downturn in low- and medium-wage manufacturing jobs and a gradual uptick in service sector employment. In other words, *industries* could still be found in these regions, just not in the same proportions or magnitudes as they had been in the past. Despite these losses in employment, improved efficiencies and mechanization actually increased output in some metropolitan areas. However, the focus in this body of research is on jobs and not output because economic development targets are most often tied to employment.

At its most basic level, deindustrialization is generally defined as the relative decline of the manufacturing sector (Bluestone and Harrison 1982). Providing an expansion of this fundamental definition, researchers have offered a variety of increasingly complex definitions with varying degrees of specialization. Kutscher and Personick (1986) offer a more nuanced definition, describing deindustrialization as a lack of investment in basic production that, when combined with plant closings and layoffs, results in a large negative merchandise trade balance. A more relativist definition is provided by Pieper (1999), who defines the trend as a relative loss - with respect to the rest of the economy - of the industrial sector's contribution to overall labor productivity growth.¹

Looking at deindustrialization as it pertains to actual places, the Federal Reserve Bank of New York released a report in the spring of 2006 on the state of manufacturing in the United States, primarily focusing on the upper Midwestern states, a region that is basically one and the same with the Rust Belt. Their research concluded that much of this area had seen widespread and persistent decline in the manufacturing sector from the 1980s forward. Though not all Rust Belt regions have been affected similarly, the analysts presented evidence that the United States overall has lost more than 5 million manufacturing jobs in the last three decades and that the share of the US

¹ Still other researchers recognize the interplay between demographic and economic shifts. Emphasizing the importance of shrinking populations in deindustrializing regions, Van der Gaag, et al (1999) define such a process as negative natural population growth as a result of declining fertility levels and increasing numbers of deaths due to aging. In their research on declining populations in the European Union, the researchers concluded that the sharpest population losses have been observed in economically less prosperous regions (Van der Gaag, et al. 1999).

labor force employed in this sector has dropped from 20% in 1979 to less than 11% in 2006 (Deitz and Orr 2006). The authors predict that these losses - many of which stem from a shedding of lower-skilled workers in a move towards higher-skilled and less labor-intensive production - will likely continue in the long term and continue to plague the Rust Belt region.

That structural change has occurred in the Rust Belt is generally accepted by economists today; looking back, however, to the time when this trend first began to unfold, we see that such an assertion was not always accepted. During the early 1980s, economists grappled with the issue of whether changes in industrial composition could best be described as cyclical or structural in nature. In 1982, Robert Lawrence and his colleagues at Brookings argued that most employment losses related to plant closings at that time were only cyclical in nature and not permanent. He was not alone in thinking that deindustrialization was a myth and that cyclical change, rather than structural change, better described the industrial shifts happening in the late 1970s and 1980s (Branson 1983).

Alternative views citing a more structural type of change were given by Thurow (1980), Bluestone and Harrison (1982), and Magaziner and Reich (1982), among others. Thurow, who was the first to coin the term “sunrise industries”, argued that structural changes in the economy had paralyzed government’s ability to assist in economic recovery. He advocated focused government investment in sunrise industries, including high technology production and service activities. Bluestone and Harrison (1983), who provided empirical evidence of structural change in the United States, argued that

deindustrialization resulted from the increased mobility of capital and a systematic shift in resources to low-cost locations. Bluestone followed with a 1984 article, "Is Deindustrialization a Myth? Capital Mobility versus Absorptive Capacity in the U. S. Economy" finding that notable job losses transpired in many basic industries throughout the Midwest. Primarily in agreement with Bluestone and Harrison, Magaziner and Reich (1983) proposed a series of policies and plans to improve the relationship between industry and government as a way of combating the structural change seen as a result of deindustrialization. In the end, those who supported structural change seemingly won out, as it is commonly believed today that the industrial structure of regions within the Rust Belt underwent permanent and often irreversible changes as evidenced by the substantial permanent job losses seen in key basic industries (Varaiya and Wiseman 1981).

Within the structural change camp, further hypothesizing about the causes of deindustrialization also occurred. From this discourse emerged two main theories: the concept of postindustrial society seen through the lens of product cycle theory and the concept of capital mobility seen through the lens of industrial relation theory. Although both theories contribute to our understanding of deindustrialization, they differ widely in their discussion of global and local forces.

Product cycle theorists generally believe that long-term patterns of international trade are influenced by product innovation and subsequent diffusion. The product cycle theory draws upon Ricardo's (1821) model of comparative advantage, which posited that diffusion is the natural process

whereby businesses move toward places where their inputs can be obtained less expensively. Thus, an international diffusion of manufacturing seems likely as it is a necessary component of the product life cycle. It makes sense then that in a postindustrial society the growth and decline of regions reflects the life cycle of its core industries as they move through the processes of maturation, decentralization and ultimately relocation. Through the lens of product cycle theory, plant closings were seen as part of a natural transformation from manufacturing and production to service-based and administrative jobs (Yago, et al. 1984).

Industrial organizational theory, on the other hand, explained plant closings as a consequence of increased capital mobility (Ibid). Underlying this increase in capital mobility was a surge in North-South trade and fierce international competition. Lee (2005) argued that “Southern import penetration, accompanied by low-wage competitive advantage, has led rich Northern countries to withdraw from the traditional low-skill intensive manufacturing industries” (72). Similarly, Lee found that international competition often resulted in multinational firms searching for cheaper labor and less restrictive regulations of labor and environments abroad (73). Exacerbating this trend in the Rust Belt was the rise of large, multi-locational firms, which are even less accountable to the region in which they are located because of the relative ease with which production can be moved to lower-wage regions in the US and elsewhere.

Global Forces with Regional and Local Implications

Distillation of the existing research on deindustrialization suggests that we still have much to learn about its causes, its effects, and its implications for various regions. Knowing that deindustrialization was a very complicated and nuanced phenomenon, we can ascertain that it affected each case study region, and possibly its central city, in slightly different ways. For some regions, job losses were swift and devastating. For others, the losses were gradual but unrelenting. Still other places saw minimal job losses or central city losses that were masked by gains in other parts of the region. Such variations in how deindustrialization played out at both the regional and sub-regional levels can likely be explained by a variety of factors including local and regional assets, history, leadership, governmental structure, and politics (Hill, et al. 2008).

While these differences will be addressed in subsequent chapters, it is important here, in the context of a deindustrialization discussion, to flesh out how different sectors of manufacturing were affected by deindustrialization at the global scale. Though an overview of the sectoral specializations in each case study region will not be provided until Chapter 4 (when a more thorough exploration is possible), a basic understanding of the Rust Belt tells us that within the manufacturing sector, there were two main specialties for which the region was known: automobile production and steel manufacturing. Deindustrialization affected both industries greatly but in slightly different ways.

Between the onset of the industrial revolution and the end of World War II, steel production grew in proportion to an ever-increasing global demand,

especially during wartime. As production capacity grew and demand began to wane during the post-war period, the global market became saturated and steel prices saw a steep and swift decline, particularly during the 1970s (Revenga 1992). The downturn was especially detrimental to the steel economies of the Rust Belt, causing production and employment to slow dramatically in the late-1970s and 1980s (Crandall 1996). Though some of this employment loss was due to improved technological efficiencies, much of it was due to outsourcing and disinvestment. Such losses affected steel-intensive regions immensely because steel jobs were generally union jobs with high wages and good benefits. If these jobs were replaced at all, it was often with lower-paying jobs in the service sector (Sassen 1990(a)).

Like the steel industry, the automobile industry experienced rapid growth during World War I and II (Ingrassia and White 1995). In the automobile industry, however, that growth continued through the 1950s, with the exception of the Great Depression. During the 1940s and 1950s, automobile production - led by General Motors, Cadillac and Ford - became a symbol of American prosperity. However, beginning in the 1960s and 1970s, Asian and European automobile manufacturers began to enter the United States market, gradually capturing market share with their smaller, more reliable, and generally less-expensive vehicles (Dohse, et al. 1985). As foreign automobiles gained ground in the 1970s and 1980s, sales of American-made automobiles fell off gradually, causing massive devastation in many Rust Belt regions (High 2003). Additional employment losses in automobile manufacturing also occurred when manufacturers looked to mechanization as a way to lower production costs, improve efficiencies, and increase profits (Schoenberger

1987). In total, the United States saw a loss of approximately 500,000 motor vehicles and equipment jobs between 1979 and 1982, the majority of which were located in the United States Rust Belt (Singleton 1992).

Compounding these job losses in the auto industry were additional losses seen in related sectors like parts production, which were generally located in regions within the Rust Belt. As Bluestone and Harrison (1982) noted, “The biggest losers in this instance are those who work in closely allied industries such as steel, rubber, metalworking machinery, and metal stampings” (72). In other words, losses in automobile production jobs beget losses in many other related industries, including steel. Given that many of these related components were produced in other metropolitan areas, one can begin to grasp how interdependent these regions really were.

From the aforementioned literature, we can state confidently that deindustrialization occurred within the United States Rust Belt during the latter part of the 20th century. We can also assert that it affected individual regions within the Rust Belt in different ways and at different times. From the sectoral analysis we learn that global economic forces affected each industry in different ways and at slightly different times. We return to this subject in Chapter 4, but for now we are left with the understanding that economic restructuring affected various sectors of the economy differently, varying by time and degree. For a researcher, such variation is simultaneously challenging and rewarding; it’s challenging in that it causes difficulty in identifying research-worthy commonalities and rewarding because it affords us the opportunity to uncover interesting and potentially useful threads across

cases. In the case of deindustrialization, these findings become even more interesting when mapped against theories of regional resilience, a concept to which we now turn.

Resilience and Regions

Unlike deindustrialization, the concept of regional resilience has only recently risen to prominence.² Though resilience has long been used as a way to describe an individual's response to a specific challenge or traumatic event, its application to places and structures has only lately been explored (Bonanno 2004; Kaplan 1999). Recent investigations of urban resilience have found that cities tend to be resilient in the face of natural disasters; 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 and 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 and 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, et al. 2010).

² The Building Resilient Regions network, a MacArthur Foundation-sponsored research effort of which I am a student member, examines the role of governance and other factors in shaping regional resilience outcomes in the face of long-term region-scale economic and social challenges (<http://brr.berkeley.edu>).

The Limitations of Ecological and Engineering Resilience

Like deindustrialization, 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 other fields. We learn from ecologists and engineers that there are two main types of resilience: *ecological resilience*, which describes instances in which some sort of disruption pushes a system from one equilibrium to another; and *engineering resilience*, which pertains to instances in which 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 and 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, et al. 2004; Vale and Campanella 2005).

In order to understand these main conceptualizations of resilience, it is useful to think about the two main types of challenges that regions face: disasters, which generally happen once and often rather quickly, and slow-burns or slow-moving crises, which unfold gradually over time. Studies of responses to disasters (e.g., hurricane, flood, tornado, tsunami), which often use the engineering version of resilience, tend to focus on the ability of a city or region to recover its population, economy, or built form (Vale and Campanella, eds. 2005). A city or region that is resilient in the face of a disaster would therefore be one that resumed its growth trajectory or previous functions after a brief disruption (Pendall, et al. 2010).

On the other hand, researchers studying a city or region's response to a slow burn or slow-moving crisis (e.g., economic restructuring, influx of immigrants) are more likely to focus on the transformation of systems as they adapt over longer periods of time. Instead of looking for a quick 'return to normalcy', a resilient region is one where there has been a gradual reduction in its unemployment or poverty rates. Rather than looking far backward in time, researchers of slow-moving crises often look to the recent past to see whether conditions have improved in the last year or in the last decade. A resilient region in this case would be one that, in the face of a slow burn, has either improved on the outcome being measured, or at least not worsened, since the previous time period (Pendall, et al. 2010). Depending on the variable being considered, we might measure this type of resilience by the length of time needed to resume a gradual decrease in unemployment or poverty.

In the end, neither one of these traditional conceptualizations of resilience is appropriate for the type of research being conducted here. When regional actors develop a response to deindustrialization, they aren't looking to achieve (or maintain) a new equilibrium, nor are they looking to simply 'bounce back' to their pre-challenge state. Regional resilience is not simply accepting a new equilibrium, especially if that new equilibrium just means the sub-par status quo of the post-challenge period. In other words, regional actors ought not to be satisfied with a new equilibrium that includes a higher unemployment rate or greater inequity amongst residents, both of which are common features of a post-disaster state. Simply stated, urban planners and policy-makers should never be satisfied when a disruption or challenge sends a region into a new, less desirable equilibrium.

At the same time, regional resilience is also not simply 'bouncing back' to a region's 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 be possible anyway. This engineering view of resilience is imperfect in that it is only concerned with how fast or how easily a region 'bounces back' or recovers from a particular challenge. Such a framework says nothing about the tradeoffs associated with 'bouncing back' and nothing 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. Instead, engineering resilience corresponds to the speed with which a region returns to its 'normal' or pre-challenge state, veritably ignoring the concepts of adaptation, preparation or experiential learning.

Adaptive Resilience

A review of the relevant literature confirms that there clearly are tensions among and between different conceptualizations and measures of resilience. It would be imprudent to suggest then that there is any one real measure of regional resilience or any one optimal regional state, as both the measure and the state will depend on the problem and the region being considered (Christopherson 2010). One way to help clarify our discussion of resilience is to think about an individual region – say, Detroit - 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 refers to a system that

has the ability to change or adapt in response to stresses and strains (Carpenter, et al. 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 Detroit, and in most of the other case study regions, where decades of restructuring have eroded any sense of 'normalcy', it is this adaptive systems perspective of resilience that seems most relevant.

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 (for more on the adaptive cycle, see Holling, et al. 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 Figure 2). 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*. Any given region will experience varying levels of resilience, depending on where it is within the four-phase cycle. Each quadrant denotes a unique phase in the adaptive cycle. Each phase reflects the characteristics of a system or a region and describes the level and direction of resilience at a given moment in time. A region that has recently experienced the loss of a major employer would likely be in the release phase, a period of great uncertainty where resilience is low but potentially increasing. Depending on how regional actors responded, this same region may soon experience reorganization, a period of great innovation and likely some experimentation.

For example, if we think about the classic Rust Belt region of Detroit, Michigan, it seems appropriate to say that the region has long hovered between the lower-level resilience phases of conservation and release. The Detroit region, which will be explored in greater detail in Chapter 5, experienced a relatively long period of conservation, as automobile production soared in the early part of the 20th century. Later on, as domestic automobile producers faced greater challenges, the region experienced release, resulting in a protracted period of uncertainty and collapse.

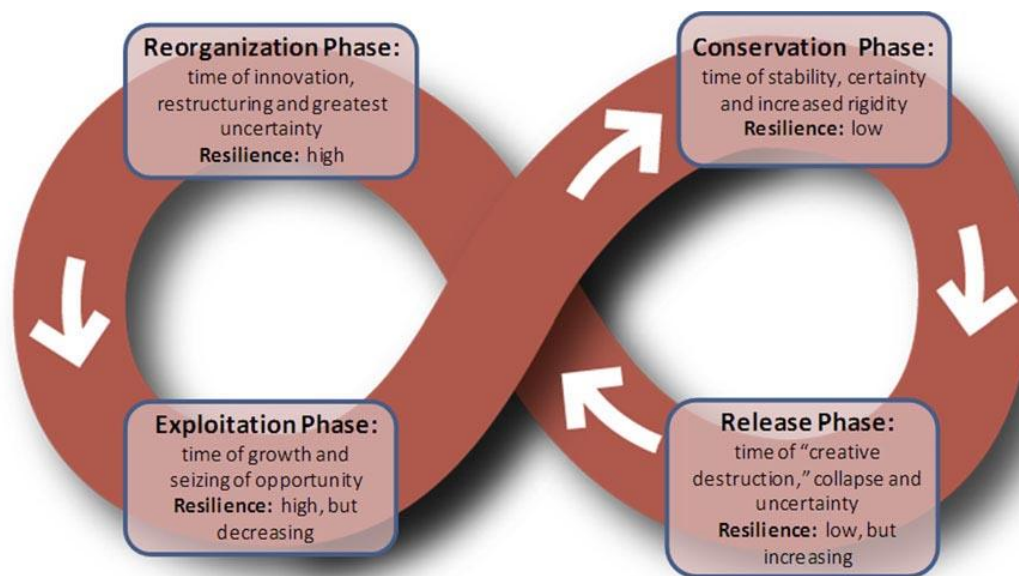


Figure 2 –Four-phase cycle of system adaptation and change. Source: Pendall, et al (2010), Adapted from Holling, et al. (2002).

Such thinking is, of course, overly simplistic. Determining a region’s adaptive resilience is not as easy as pointing to a certain quadrant of the figure-8 diagram; the adaptive capabilities of a region are far more nuanced than that. Adaptation may be as straight-forward as implementing job training programs for displaced workers or as complex as improving a region’s social safety net.

How a region chooses to adapt to challenges and how well they navigate the four stages of the adaptive cycle depends on a variety of factors, many of which will be discussed vis-à-vis the eight case study regions below. Despite its imprecision, the figure 8 diagram provides a useful, albeit simplified, framework for thinking about the adaptive resilience of regions.

One problem that complicates matters is the fact that the adaptive resilience of a given region will likely differ based upon the person with whom we talk. For instance, a corporate executive might see increased productivity or greater market share in the face of international competition as adaptive resilience. Whereas a union official might disagree, seeing the preservation of jobs as more important. A local politician, who is duly concerned with preserving jobs in her or his constituency, will probably also care about city revenues. Thus, each of these actors may assess a region's adaptive resilience by his or her own set of indicators, including: job growth; productivity growth in terms of value-added per job; increased market share; preservation of union jobs; and others. Sometimes these types of outcomes may in fact be at odds with one another. For instance, in the case of Detroit, a GM official, who is really only concerned with increasing market share, does not care whether production jobs remain in metropolitan Detroit or even whether the region as a whole will prosper in the long run; he or she probably only cares that quality GM automobiles are being produced as quickly and efficiently as possible. On the other hand, a local public official – who once may have cared about market share because of the historical correlation between GM's success and metropolitan Detroit's prosperity – is probably now more concerned with keeping GM and other high-paying jobs in his or her jurisdiction than whether

or not GM's market share is increasing. Hence, we can see how there might be divergence in terms of what each actor sees as adaptive resilience in their region.

Complicating matters even more is the fact that additional measures that fall outside of the economic sphere may also relate to the adaptive resilience of a given region. In the case of Detroit, which has adapted quite poorly in terms of most conventional economic measures, the region did see improvements in terms of livability, civic engagement, and social capital despite some disappointing developments of the more economic variety. The importance of non-economic measures in studies of regional resilience is not a new discovery. Scholars have found a variety of alternative measures of regional performance that fall outside the purview of traditional economic indicators. Stiglitz (2002) has found that "broadly participatory processes (such as "voice," openness, and transparency)" contribute to sustained regional health (163). Similarly, Pastor, et al. (2009) have argued that regional resilience is increasingly determined by business and community group efforts coalescing around issues of regional equity, including infrastructure, housing and workforce development. Others have found that these traditional locational factors are necessary pre-conditions, and softer quality of life factors like community image and identity may provide supplementary, optimal conditions for regional performance (Wong 2001). As qualitative data suggest below, these non-economic measures tell a very important part of the region's story and indicate that adaptive resilience may in fact reveal itself beyond the mask of traditional economic indicators.

Responses and ‘Good Outcomes’

Such divergence suggests that there may be more than one way to assess how well a region navigates a challenge like deindustrialization. One way to clarify our assessment is to envision a set of hypothetical ‘good outcomes’ that would act as barometers of a region’s adaptive response to a given challenge. Though there are no hard and fast rules about how a region *should* recover from a challenge, the presence of ‘good outcomes’ would suggest that a region has navigated the challenge well and the absence of ‘good outcomes’ would suggest that it had not been as successful in its navigation of the challenge. Depending on the subject matter of interest, these good outcomes might focus on the environment, society as a whole or individual persons, infrastructural systems, among others.

For the purposes of this study, the relatively narrow focus will be on outcomes related to demographics, economy and equity, as they are most closely related to the goals of most economic development plans and policies. Borrowing from Foster (2010), whose case study of Buffalo will be discussed with greater detail in Chapter 4, we find a number of ways in which ‘good outcomes’ relate to adaptive resilience. In terms of demographics, our quest to uncover ‘good outcomes’ urges us to ask whether population for the region as a whole stabilized or increased as the region adapted to the challenge at hand. At a more micro level, we also want to know whether there is an equitable distribution of people between city and suburbs and whether or not the region is racially integrated.³ In terms of the economy, we would want to

³ Foster (2010) does not explicitly include measures of city-suburban population ratios or racial composition. However, for the purposes of this multi-N study, these measures are included so that comparison of these indicators across cases is made possible.

know whether employment levels and rates have stabilized or improved over time and whether per capita income has improved for people in the region. And finally, in terms of equity, we would want to know whether the poverty rate has improved over time and whether the ratio of poverty in the central city to poverty in the suburbs has also improved. Through a combination of quantitative data in Chapter 4 and qualitative data in Chapters 5 through 7, answers to all of these questions for each region will be discussed below. In the meantime, we can say that there is evidence of 'good outcomes' in the face of deindustrialization if: a region has a stable, equitably-distributed, and racially integrated population base; a stable or improving unemployment rate; improving per capita income; and declining but equitably-distributed poverty.

If we think about adaptation and response as a means to achieving these 'good outcomes' throughout the adaptive cycle, we must also ask another set of questions about the actors and the decisions that they made. To gauge a given region's movement through the adaptive cycle, it is essential to ask whether regional leaders have responded in a way that improves the chances for a healthy region in the long run. Have regional leaders incorporated broad community input into crafting their response? Have they drawn upon the strength 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 to increase employment opportunities for residents, improve the educational system, invest in sustainable transit, and/or increase regional equity? How have they adjusted to the realities of changing population and employment levels? To answer many of these questions, it is necessary to examine both quantitative and qualitative data. Knowing how each region

fares in light of both types of data makes it possible to then effectively locate each region's position within the four stages of the figure 8 diagram.

Knowing which quadrant or phase best describes each case study region in the wake of deindustrialization goes a long way in telling how and how well each region adapted to the trials of deindustrialization. The challenge then becomes figuring out why regions experience the adaptive cycle in different ways. How do some regions 'turn the corner' between conservation and release or between reorganization and exploitation? Does 'turning the corner' necessarily result in 'good outcomes'? Why do some regions remain in the conservation quadrant longer than others?

These questions remind us of the importance of spending time to identify actors and their underlying motivations and assumptions. Furthermore, these questions also lend weight to the idea that there are many ways to understand adaptive regional resilience in the wake of a long-term challenge, including conventional economic measures and indicators of a less economic variety. In subsequent chapters, both types of measures will be examined vis-à-vis each case study regions' economic development response to deindustrialization. Conclusions based upon these measures will help us to identify how each region has used economic development planning to adapt over time and how its actions relate to the four phases of the figure 8 diagram. However, reaching this goal will require that we first think about the range of economic development responses available to these regions.

Economic Development: Planning, Process and Actors

Historically, one of the main ways regions have responded to economic challenges was through economic development planning and the use of related tools and strategies. However, during the 1970s and 1980s, as the Rust Belt grappled with widespread economic restructuring, there was also a dramatic shift in the way that economic development was conceived, funded and executed. Nationally, we saw a shift in focus from federally-driven initiatives to more local- and state-based practices as well as increased public-private partnerships (Stoker 1998). The impetus for this shift came largely from the Republicans in power at the time, many of whom called for widespread deregulation and decentralization of numerous government services including many economic development initiatives. With this decentralization came substantial cutbacks in federal government funding for programs like Urban Development Actions Grants (UDAG), Community Development Block Grants (CDBG), and numerous Economic Development Administration (EDA) grants.

In addition to these federal funding cutbacks, regions also grappled with the stresses of increasing international trade and greater international access to the United States consumer market. Increased access resulted in increased imports, which provided more options at lower costs for U.S. consumers but more competition for U.S. producers. Increased international trade, perpetuated in part by U.S. policymakers' indifference towards foreign competition in manufacturing, exposed weaknesses in many Midwestern economies. Dominant industries across the Midwest, many of which had long been bolstered by state and federal government efforts, began to realize that

their failure to innovate had rendered large sectors of the economy inefficient, if not obsolete.

As corporations belatedly scrambled to innovate, modernize, and invest in appropriate technologies, local and regional leaders looked for ways to help corporations and boost their economies. A growing uncertainty about federal support for economic development efforts led many state and local governments to find their own ways of addressing these problems (Kossy 1996). In the industrial Midwest, finding new solutions often meant searching for new sources of leadership and financial support. Rather than solely relying on federal grants for their economic development projects, regional leaders increasingly chose to form their own economic development organizations in order to set agendas, access federal dollars, and leverage private investment for regional projects. The growing importance of private investment for economic development brought with it an increase in the role of the private sector in the decision-making process (Cox and Mair 1988, Stone 1989).

As private sector involvement grew, economic development officials became intermediaries who would act as regional cheerleaders, identifying potential projects and then negotiating deals to make them happen. This new private-public partnership generally placed greater emphasis on creating a good and attractive business climate and moved away from previous concerns with inner city poverty alleviation and equitable development (Molotch 1988). The tools used for economic development began to shift from federal and state entitlement programs to local and regional incentives, subsidies, business assistance, and the banking and development of land. Fittingly, the metrics

changed from ambiguous concepts like regional equity and poverty alleviation to employment rates and tax revenues (Kossy 1996).

In most places, private sector involvement would change the dynamic of the decision-making process and the tone of the development agenda. As Kossy (1996) notes, “economic development was recast to address the whole constellation of issues affecting the business climate, as standards of community and industrial competitiveness became synonymous with community quality” (302). Recasting economic development meant something different for each region; the shape of a region’s agenda is likely to depend on who is involved in the process, the region’s strengths and weaknesses, as well as its assets and constraints (Strange 1997; DiGaetano and Lawless 1999; DeSocio 2007). Recasting economic development also differed across regions based on the approaches that regional actors took.

In some regions, economic development remained largely within the policy realm, involving policy-driven agendas focused on things like annexation and increasingly popular relocation incentives. In other regions, economic development emphasized planning or visioning processes in order to set the agenda and tone for future regional development. In some regions, economic development officials set their sight on tourism by subsidizing the construction of amenities like stadiums, waterfronts, and more.⁴ Although slightly rarer, economic development programs sometimes focused on downtown living by

⁴ Scholars have long debated the efficacy of the amenity and event-based attraction approaches to economic development (Gottlieb 1994; Burbank, et al. 2002). In general, most of these subsidized projects, especially stadium construction, do not benefit the host region in the longer term (Bachelor 1998).

either supporting or creating housing and amenities for people who wished to live downtown (McGovern 1998; Birch 2002). In most regions, economic development involved an amalgamation of policy and planning. Whether or not any of these economic development programs and policies were effective in dealing with economic restructuring remains to be seen. Uncovering variations across cases and determining the efficacy of each region's response are two of the underlying goals of this study.

Research emerging from the fields of planning and political science has provided us with a plethora of findings on the performance of individual regions in the wake of economic restructuring (Sassen 1990(b); Crump and Merrett 1998) and additional research on regional economic development responses to economic restructuring (Rodriguez-Pose and Tomaney 1999; Heathcott 2005). Much of the research in these fields finds that power is generally held by the elites of the political, public and economic realms and that the relative power of each depends in part on the region's governance and government structures, industrial composition, racial and class makeup and organization, and the confluence of state, national, and international forces (Mollenkopf 1983; Logan and Molotch 1988; Stone 1989; Imbroscio 1998; Davies 2002).

Looking back at this cast of characters, we can imagine diverse, lively and contentious conversations centered on the question of how each region should respond to deindustrialization. The multitude of actors most certainly presented a variety of opinions about how the strategy should unfold and whom it should involve. Making sense of this process is not easy. However,

imagine, for a second, that the creation of a regional strategy is similar to the preparation of a complex meal being made in a busy and over-staffed kitchen. This kitchen – like a microcosm of the region – is filled with many people making suggestions about how to prepare this meal. The suggestions they make are probably based on their own past experiences in making food and their own preferences about how they would like the meal to taste.

Whether or not their final suggestions will be taken into consideration will probably depend, in part, on: how loud their voice is, how experienced they are in making meals, how much their ingredients cost and the perceived contribution that their suggested action or ingredient will make to the final product. We can imagine that if one of the more senior chefs gets his way, the meal might look a lot like the final product he had envisioned. Or, if a group of the more junior chefs collectively come up with a more enticing option, we can see how their idea might greatly influence the final product. In the end, the meal could taste any number of different ways. The final recipe will likely depend on who is most convincing in their suggestions and who has the most power.⁵

Now, if we look at a region trying to devise a plan to deal with long-term industrial restructuring (their meal), we see that there are many different actors (chefs) who may wish to contribute to, or influence the final plan. Similar to the chefs in the kitchen, regional actors will compete to have their suggestions

⁵ As political scientists and researchers of pluralism have long stated, power flows from a variety of different sources including those within the political realm and those outside of it (Jones and Bachelor 1993; Dahl 2005). Elite theorists have noted, however, that power is most often held by elites – from the public, private and civic sectors - who generally have higher levels of resources and the backing of patrons (Putnam 1993).

heard. Some of the less powerful players – for example, the smaller municipalities – might band together to voice their desires. Or, alternatively, one major power broker – say, an executive of a large corporation or a suburban county executive – may simply demand that their suggestions be considered and maybe even implemented. The final regional response will depend upon which regional actors are heard and which ideas they propose.⁶ Making sense of these economic development responses and the various ways in which regions crafted their responses follows below.

Typologizing Economic Development Responses

Because a regional economy is regionally dependent by definition, it seems fitting that further investigation of the decision-making process at the regional scale would help us to better understand how and why regions varied in their responses to deindustrialization. Though numerous case studies have been conducted in order to investigate how a single region crafted its response or how a small number of regions crafted their individual responses, there is very little in the literature that attempts to compare the economic development responses to deindustrialization *across* a larger group of regions. This type of study is important in that it helps identify the particular approaches used in

⁶ Researchers of network density and social capital have found that dense networks of civic engagement create higher levels of trust, which in turn yields higher levels of cooperation in the face of a challenge (Putnam 1993). Within this communitarian approach, such cooperation is thought to reduce transaction costs and assist in collective action efforts thereby increasing the likelihood of a desirable outcome (Putnam 2001). In slight contrast, the social mobilization literature suggests that acknowledgement of existing strategic relationships among various factions of interest within a community is necessary in order to then use these relationships as leverage in mobilizing collective actions (Skocpol 1996 and DeFillipis 2001). Safford (2004) has argued that the combination and intersection of civic and economic relationships in a given area determines the degree to which its actors are able to facilitate collective action in response to deindustrialization.

given areas, categorizes these responses and then begins to develop hypotheses about the effectiveness of these approaches across cases.

When making comparisons across cases, researchers often utilize typologies as a way of categorizing, or sifting through, the various cases in a study. Though simple sorting does little in the way of explaining causality, typologies do make it easier to compare and contrast across cases as well as identify commonalities worthy of future analysis. Typologies from a variety of disciplines abound.

Sternberg (1987) drew upon the tradition of political economy to group economic development strategies. Arguing that municipalities often have more economic development capabilities than they commonly use or even are aware of, Sternberg developed a typology of nine economic development policy groups by individual strategies and programs. A few years later, Pelisserro and Fasenfest (1989) developed a simple typology of suburban economic development policy orientations. Using a survey of economic development offices in suburban Chicago, the authors found that the economic development approaches of any given suburb generally could be assigned to one of five categories: aggressive, regulatory, cooperative, retentive, and reactive.

More recently, in a research note for *Economic Development Quarterly*, Reese (2006b) used cluster analysis to develop a typology of policy practice of cities based on their local economic development strategies. Her findings suggest that there are three main approaches to economic development. The first

combines infrastructure investment and financial incentives. These cities tend to provide investments in water, sewer, and roads, as well as in downtown streetscapes and service enhancements. The second approach uses all possible techniques, including tax incentives, business assistance, and land development policies. The third approach is to remain passive and to do very little in the way of economic development. Ultimately, Reese's findings are useful in that they are among the first to utilize survey data from individual economic development practitioners. However, the research notes the need for further research on economic development strategies of the past and strategies beyond the city scale.

As the literature attests, numerous scholars have grappled with the construction of typologies to assist in the categorization of local responses to restructuring. Only one, however, matched distinctive responses to deindustrialization with specific economic development strategies. In their article, "Bowing Out, Bidding Down, and Betting on the Basics: Midwestern Responses to Deindustrialization in the 1980s", Markusen and Carlson (1988) described three main responses to economic restructuring. The first, which Markusen and Carlson call 'Bowing Out', described instances in which economic development officials chose to cut their losses and abandon the idea of manufacturing reliance, focusing their economic development efforts instead on the attraction and growth of service sector employment opportunities. The second, 'Bidding Down', involved strategies that tried to curtail manufacturing losses by decreasing the cost of doing business in a given region, enticing manufacturers to either move in or to stay by offering subsidies, tax credits and other lucrative offers. The third, known as 'Betting

on the Basics', described economic development strategies that targeted existing heavy industry, emphasizing the retention and expansion of firms already in the area. Incidentally, it is this third category that Markusen and Carlson think most useful to industrial Midwestern regional economies. The authors argued that industrial retention, a hallmark of 'Betting on the Basics', was the approach most concerned with community issues because it acknowledge the social cost of plant shutdowns. I also include a fourth type of strategy that I call 'Sharing the Wealth', which was later proposed by Clavel and Kleniewski (1990) and included strategies that embraced growth in the service sector and worked to incorporate linkage policies for the redistribution of related benefits in that sector. To some extent, the 'Sharing the Wealth' approach embraced all three strategies – attraction, retention and entrepreneurship – as long as there was an emphasis on equitable growth and linkage practices. The responses and corresponding strategies for all four response types are summarized in Table 1.

In the case study descriptions below, each region will be analyzed and subsequently assigned to one or more response groups. In the meantime, preliminary research shows that, to some extent, most regions employed at least one of these strategies during the late 1970s and early 1980s. In some cases, a region started using one approach and then shifted over time to employ another approach. In other cases, a region may have utilized a combination of two approaches throughout the entire period of study. These possibilities suggest that there is much to be learned about the adaptive resilience of regions, their responses to deindustrialization, and how their approaches changed over time.

Table 1 - Markusen and Carlson's (1988) Typology of Responses and Strategies to Deindustrialization (summarized by author)

Responses	Strategies		
	Attracting business from elsewhere	Fostering new business formation	Retaining local firms
'Bowling Out' – concentrating resources on high tech, finance and service centers, Thurow's sunrise industries, and letting manufacturing die a natural death	X	X	
'Bidding Down' – economy must revitalize its basic industry by overcoming uncompetitive cost structures (focuses on labor/management conflicts and on trimming the cost of doing business)	X		X
'Betting on the Basics' – advocates targeting of existing heavy industry for ED efforts; rejects "sunrise" industry route; emphasis on retention and expansion strategies		X	X
'Sharing the Wealth' – focuses on service sector growth and the development of policies oriented toward labor and community groups rather than the corporate sector; incorporates linkages policies for the redistribution of service sector growth	X	X	X

Overall, the deindustrialization and resilience literatures tell us a lot about the intricacies and nuances of regions. The deindustrialization literature tells us that the 1970s and 1980s were a particularly difficult time for much of the United States Rust Belt. Though some regions eventually saw at least some improvement, many continue to struggle with the effects of structural change today. Our interpretation and understanding of how these regions responded to deindustrialization is greatly informed by the resilience literature, which tells us that there are a variety of ways we can look at regional responses. For the purposes of this study, we can conclude that the resilience concept is most

useful when we think about regions as complex adaptive systems working their way through the four stages of the figure 8 diagram. Moving away from the engineering and ecological perspectives that view resilience as an outcome, I will instead focus on the ability of a region to continually adapt and respond to a given challenge or set of related challenges. I will do so through the use of both traditional economic measures and indicators of a less traditional variety. To that end, in Chapter 3, I describe the types of data used in these indicators as well as the process by which they were collected.

CHAPTER 3

Questions, Data, Hypotheses, and Methods

Having now been acquainted with both the deindustrialization and resilience concepts, we may now turn towards the particulars of this research project. More specifically, it is in this chapter that I make clear the specific research questions, data, hypotheses, and methods used to conduct this research. I begin first by outlining the main motivations of this research in question form. I then describe the data necessary to answer these questions and the process by which the data were collected. Two main hypotheses are then proposed and subsequently followed by a discussion of the methods used in this study and the limitations of this research. In all but the methods section, the descriptions pertain to the research program for the single case study of Detroit seen in Chapter 5 as well as the eight-region comparison seen in Chapters 6 and 7.

Research Questions

There are three main questions at the root of this research. All three pertain to economic development in Rust Belt regions, albeit in slightly different ways. All three also encourage us to consider the unique features of metropolitan regions, particularly during one important period of history. In their own way, all three also urge us to consider how decision makers affect regional outcomes, either on their own or in combination with other important factors. The research questions described below are intended to steer us towards a

better understanding of regions, regional leadership and the intersection of the two.

Stemming from a desire to learn more about the decisions being made in the wake of deindustrialization, I start by asking a fairly simple question: *who was involved in crafting each region's economic development response to deindustrialization and how did they go about crafting it?* In the first part of this question, the overarching goal is to identify the main stakeholders involved in each region's decision-making process. Then, once these leaders have been identified, I seek to understand the decision-making process itself in each of the eight case study regions. Identifying the people who are sitting at the 'decision-making table' goes a long way in explaining a region's power dynamic. For instance, a region ruled largely by the economic elite might gear their recovery plan towards policies and practices that will aid their own firm or their own economic sector. Or, in a region where political leadership is strong, the recovery plan might be geared towards workforce development and various other constituent-friendly types of strategies. Therefore, knowing who is at the table is helpful information in that it narrows in on potential interviewees who help us to both better understand their region's decision-making process and gain insight into the types of actors involved in this process.

Building on the findings from this first question, the second research question urges us to consider the underlying rationale of each region's economic development response. Knowing who was 'at the table' gives us some general insight as to the kinds of issues that were likely discussed but tells us little

about specific agendas. To gain a better understanding of what it is that regional leaders wanted from the economic development response, we must ask another question: *what were the specific motivations or goals of each region's economic development response?* In asking this question, the hope is that we will better understand the basic goals of each region's response so that we might then map them against the regional outcomes seen in the longer term.

Once we know more about the primary players and their motivations, we can then begin thinking about how these components relate to adaptive resilience. More specifically, we can ask a third research question: *to what extent did these regions experience 'good outcomes' as they adapted to the challenges associated with deindustrialization?* In other words, findings from the first two research questions urge us to consider how well each region adapted and responded to the challenge of deindustrialization by way of economic development. In order to answer this question, we will turn to the aforementioned measures of 'good outcomes' and also uncover more detailed information about the particular strengths, weaknesses, assets and liabilities of each case study region.

The motivation for all three research questions comes from the fact that the relationship between adaptive resilience and 'good outcomes' is not clear and is likely different for each individual region. In order to better understand that relationship, it is necessary to weave together a more holistic understanding of how regions respond throughout the entire adaptive cycle. It would be imprudent to look at a simple aggregate indicator to determine resilience;

instead, we must understand how the engagement of actors, the setting of an agenda, and, eventually, 'good outcomes' all determine whether or not a region has exhibited adaptive resilience in the face of a given challenge.

Data

The primary and secondary data used in this study come from a variety of sources (see Table 2). Much of the quantitative data about national economic trends discussed below in Chapter 4 come from the federal government, including the U.S. Census Bureau, Bureau of Economic Analysis, and the Bureau of Labor Statistics. The qualitative data presented in Chapters 5 through 7, however, are primary data collected by the author through participant interviews for the purposes of this study. Other data come from local periodicals, planning documents, as well as state and local budgets. The data collection process was similar for all eight regions except that far more interviews were conducted for the Detroit case study than were conducted for the seven other regions.

In order to gain first-person accounts of the local decision-making process in Detroit, I first identified, and later conducted interviews with, 27 key stakeholders in the summer and fall of 2008. For the other eight regions, I conducted 31 additional interviews in 2009, with an average of three or more for each of the remaining seven regions. In all eight regions, the lists of stakeholders were culled from historical public records of relevant local, state and regional meetings; previously published research on this time period; and by recommendation from other living stakeholders in the region.

Table 2 - Questions, Data, and Methods

Question	<i>RQ1: Who was involved in crafting each region's economic development response and how did they go about crafting it?</i>	<i>RQ2: What were the specific motivations or goals of each region's economic development response?</i>	<i>RQ3: To what extent did these regions experience 'good outcomes' as they adapted to the challenges associated with deindustrialization?</i>
Data	Local, regional, and state planning documents; periodicals; interview transcripts	Local, regional, and state planning documents; periodicals; interview transcripts; local budgets	Interview transcripts; periodicals; data collected from: U.S. Census; Bureau of Economic Analysis; Bureau of Labor Statistics
Methods	Archival research; content analysis; participant interviews	Archival research; content analysis; participant interviews; budget analysis	Participant interviews; content analysis; archival research; quantitative analysis

In most cases, initial contact was made with the staff of each region's current economic development agency. Current staff was asked to identify the person who can best speak to the economic development decision-making process at the onset of deindustrialization. In most cases, I was referred to a former head of the local or regional economic development organization or government planning department. From there, I sought the names of at least one person

from the central city, one person from the county, one person from one or two of the major suburbs, and a person from any related regional entities in existence. Attempts were then made to interview at least three people from this list of stakeholders. In all eight regions, participants reflected a diverse sample of interests, including leaders from both the private and public sectors and from offices having urban, suburban and regional interests. Interviews specifically targeted the important players who made decisions about economic development planning and policy during the late 1970s and early 1980s.⁷

Participants were asked about their perception of their region's economy during this time period, their responses to the economic changes that they saw unfolding and their opinions on the efficacy of these responses (see Appendix for complete interview guide). Furthermore, interviewees were also asked to discuss the local effects of deindustrialization, the specific types of policies and programs implemented to address these effects, and the effectiveness of the chosen economic development strategies used in each of the eight Rust Belt regions. The primary interview questions for this portion of the dissertation research included the following:

- When did you first become aware of the severity of the deindustrialization trend?

⁷ Much of this interview process mirrored the process established in Mayer and Greenberg's (2001) study. The authors interviewed local leaders in 34 small- and medium-sized cities that experienced prolonged economic prosperity built around a major industry or firm and then underwent drastic economic decline when the industry or firm downsized or closed. The authors conducted extensive interviews with local officials, community leaders, and economic development practitioners, asking about their local responses. In the end, Mayer and Greenberg conclude that union issues and environmental undesirability were significant obstacles in many regions and that the most critical components of success in redevelopment efforts were leadership and community involvement (215).

- To what extent did you engage in efforts to then move the region towards recovery?
- Which industries, if any, were prioritized in your region's economic development strategy?
- What were the specific types of policies or strategies that were implemented to address deindustrialization in your region?
- What were the objectives of the various strategies?
- To what extent were these strategies successful?
- To what extent did response efforts incorporate a regional perspective?

The interviews lasted between 60 and 90 minutes and followed a standard protocol intended to elicit open-ended responses. Interviews were conducted either in person or via telephone and were recorded, transcribed, and then summarized.

Hypotheses

The qualitative data gleaned from these interviews with regional stakeholders, combined with the aforementioned quantitative analysis, will help to identify the relationship between regional economic development responses to deindustrialization and post-deindustrialization outcomes. To that end, two main hypotheses have been developed to guide this study of the relationships between local economic development responses and adaptive resilience in deindustrializing regions.

First, if we think about the ongoing (and very public) challenges seen in the Detroit region - which has been relatively forthcoming in its commitment to manufacturing and ostensibly to 'Betting on the Basics' – we cannot help but notice a region that has experienced great economic challenges in recent years. Though less is publicly known about the degree of commitment to manufacturing in other Rust Belt regions, it seems plausible that *regions in*

which leaders committed to manufacturing by ‘Betting on the Basics’ will not adapt as readily or as well as regions where leaders pursued other alternatives. If this hypothesis holds true, we should expect to see Detroit respond poorly to the challenges of deindustrialization and hover in the conservation and release stages for an extended period of time. Furthermore, we should also expect to see prolonged periods of conservation and release in other regions that similarly chose to ‘Bet on the Basics.’

A second hypothesis stems from the old adage that ‘the early bird gets the worm.’ More specifically, it seems plausible that *adaptive resilience will be seen in regions where leaders responded to early signs of deindustrialization and quickly developed an appropriate economic development response.* We would expect such regions to relatively quickly turn the metaphorical ‘corner’ by navigating the collapse and uncertainty associated with the release phase. Alternatively, we might expect to see lower levels of adaptive resilience in places where leaders reacted slowly to the realities of deindustrialization. In such cases, we might also expect to see a more reactive, rather than proactive, approach to the crafting of a response and a lengthy conservation or release phase. It makes sense that regional leaders who worked to get out ahead of the manufacturing downturn would exhibit more adaptive resilience (and ‘turn the corner’) than regional leaders who denied the existence of deindustrialization or ignored calls to respond. This question of timing is discussed in greater detail in Chapter 7 below.

Method

The first part of this research, a single case study of Detroit, builds upon previous case studies of economic development responses in Flint (Lord and Price 1992), Pittsburgh (Detrick 1999), Cleveland (Hill 1995), Youngstown (Safford 2004), and Buffalo (Foster 2010). These individual case study analyses provide valuable insight into how individual regions responded to economic change during the latter half of the 20th century. The Detroit case study, presented in Chapter 5 below, is loosely modeled after these individual case studies.

As Yin (1994) has noted, the single case study approach is of great use in situations “where the case represents a critical test of existing theory, where the case is a rare or unique event, or where the case serves a revelatory purpose” (44).⁸ To some extent, the case study of Detroit does all three of these things. Utilizing the lens of adaptive resilience to examine the region’s response to deindustrialization makes this case study both a critical test of existing theory and a case that could potentially serve a revelatory purpose. Furthermore, what makes the story of Detroit so unique, and so worthy of the deep inquiries provided by a single case study approach, is the region’s severe and prolonged poor economic performance. Because of its pronounced challenges, a single case study of the Detroit region is essential. The depth afforded by this approach allows for a more thorough examination of the intricacies and nuances of this very important case.

⁸ Other studies of resilience have also utilized the single case approach to examine community resilience (Harte, et al. 2009), regional resilience (Foster 2010), and disaster resilience (Rose 2004).

While such depth is necessary in extreme cases like Detroit, one of the main drawbacks of the single case study approach is the inability to compare responses across cases. In the Rust Belt, such comparisons are helpful in determining commonalities and differences in terms of both the types of responses seen and the efficacy of these responses across regions. Somewhere between the wide breadth and shallow depth of a large-N analysis and the narrow breadth and profound depth of a single case study lies the small-N analysis utilized in the second part of this study (Chapters 6 and 7). Such an approach allows for a comparison across a select number of highly-relevant cases and the subsequent development of hypotheses related to these findings. In other words, the small-N study allows us “to develop ‘thick’ (complex or multidimensional) concepts and theories that are well-suited for description and for making inferences about simple causation on a small scale or in a few cases” (Coppedge 1999, 465). Drawing upon interviews with local stakeholders, this small-N study affords a broad yet thorough comparison of eight cases, all the while compromising little in the way of depth.

In both parts of this research, the unit of analysis is metropolitan regions in the United States Rust Belt; one single region in Chapter 5 and seven additional regions discussed in Chapters 6 and 7. Because economic development policies and plans are often implemented at the sub-regional scale, some responses discussed in the case studies will pertain to only portions of a region. In such cases, the distinction between sub-regional and regional responses will be noted and any potential implications will be discussed.

The concept of regions has long been discussed in the academic literature though its prominence has risen greatly in recent years (MacKinnon, et al. 2002, Hall 2002). The increasing popularity of the region as a concept has in many ways corresponded to its usefulness in explaining and conceptualizing changes seen in broader metropolitan economies. As counties, cities and towns continue searching for ways to stay competitive in a challenging economic environment, institutions operating at the regional scale are increasingly thought to provide the foundation for innovation and flexibility in the high-technology sectors (Saxenian 1994). Furthermore, regions are thought to be the building blocks of a competitive economy because of the potential for agglomerations, competitive industry clusters and knowledge spillovers (Cooke and Morgan 1998; Porter 1998).

Though the field as a whole remains unconvinced of the regional competitiveness debate (Imbroscio 2006), numerous researchers have made the case that widening variations seen in metropolitan growth rates in recent years indicate that the region is in fact an important economic unit with which to capture such disparity (Drennan, Tobier, and Lewis 1996). Its significance as an economic unit has been further bolstered by recent work showing that the region is the scale at which most of the nation's income inequality has been generated, observed and perpetuated (Jargowsky 1997; Ihlanfeldt and Sjoquist 1989; Wilson 1996). Such findings have, at least in part, contributed to the increasing existence of organizing at the metropolitan level to specifically challenge these issues of spatial and racial inequality. Some of the most notable examples of this can be seen in the work of Orfield (1997, 2002) and Rusk (1993, 1999), both of whom argue on behalf of regional approaches

to the sharing of tax revenues and decision-making at a regional level. Overall, the recent literature on equity and spatial fragmentation, both subjects that are of great import to the Rust Belt area, suggests that the region is an important unit of analysis and likely plays a role in determining the outcomes of the people who live within it.⁹

Limitations

It should be noted that in this project, as is the case in all research projects, there are some limitations. First and foremost, focusing specifically on the Rust Belt limits the generalizability of the research findings to some extent. Although the focused nature of the subset analyses will allow for a multi-faceted approach to studying economic development responses to deindustrialization, this study will not be generalizable to all types of deindustrializing regions. In particular, other regions, especially in other countries, may face their own unique constraints because of differences in local, external, civic and other pressures. A basic scan of the literature suggests that other areas of the world have experienced deindustrialization in different ways and at different times than we saw in the United States Rust Belt during the 1970s and 1980s (Rowthorn and Ramaswamy 1997; DiGaetano and Lawless 1999). Even within the United States,

⁹ Recent exchanges between the new and critical regionalists remind us that the region remains an exciting, albeit somewhat controversial topic (Pike, et al. 2007). New regionalists tend to emphasize the region as the most important geographic unit with which to study the effects of political and economic processes (Storper 1995; Porter 2003). Critical regionalists tend to emphasize the power of the nation state and the power of global forces in shaping the actions and reactions of regions (Ward and Jonas 2004; Allen and Cochrane 2007). More specifically, the modern tensions between the new and critical regionalist schools of thought urge us to consider how regions interact with political, economic and social processes at the global level.

deindustrialization has occurred in different ways and at different times (see Koistinen 2000 on New England and Minchin 2009 on North Carolina).

Furthermore, divergent outcomes also exist within regions at the sub-regional scale. Because there rarely are responses developed that are truly *regional* in nature, it is sometimes necessary to study a variety of sub-regional responses in order to get a sense of how the region responded as a whole. Researchers have come to believe that the strength of a given region depends, at least in part, on the strength of the region's central city or cities (Ihlanfeldt, 1994; Voith 1996;). When you strive to learn about regional success based on sub-regional strategies, the findings are inherently less generalizable and less conclusive. Though these place-specific conclusions may ultimately limit the generalizability of this research, the lessons we learn from these regions of the Rust Belt will likely outweigh any limits we experience in terms of generalizability. Because it is the metropolitan scale that we are most concerned with, most findings will pertain to a given metropolitan region as a whole. In more complex cases where there are stark contrasts between a city and the region in which it is located, I make every effort to differentiate between the various parts.

Second, the research is somewhat limited in that it is impossible to definitively determine cause and effect, especially in historical cases like those explored in this study. In other words, it is difficult to determine whether specific interventions caused the outcomes observed in these regions or whether those outcomes would have been observed absent any intervention. Researchers have noted the difficulty in determining the efficacy of local and

regional economic development programs and policies in general (Pressman and Wildavsky 1984), and specifically in the face of highly mobile capital and a national policy supporting trade liberalization (Schumpeter 1982; Demetriades and Hussein 1996). In so doing, their findings encourage us to document past interventions as a way of continuing our exploration of the relationship between economic development interventions and outcomes. Documentation of these historical interventions will bring us one step closer to understanding how economic development responses shape regional outcomes.

Because so much time has passed since many of these events took place, some of the interviewees may have had difficulty correctly remembering the specific details of certain recollections. As such, some of the qualitative data run the risk of being historically inaccurate or imprecise. In all eight regions, additional efforts were made to cross-reference events and recollections to verify their accuracy. In most cases this was done through the examination of economic development plans and other archival documents from the 1970s and 1980s. In some cases, follow-up interviews were also conducted to confirm the veracity and timing of certain historically-significant events.

Despite these potential limitations, the information presented in this dissertation will likely be of use to regions (and their leaders) confronting slow-burning challenges like deindustrialization in the future. Overall, the research will highlight how regions confronting deindustrialization varied in both their responses and in their outcomes and will illustrate how some regions successfully navigated this difficult time period while others are still fighting to reverse or curtail its negative effects.

CHAPTER 4

Regional Setting

During the 1980s, portions of the United States celebrated steady growth while others experienced prolonged and painful economic contractions. In New England, the West and the South, an increase in military contracts, financial services, and business services helped fuel substantial regional growth. The Rust Belt region, however, was largely left behind. Many of the large manufacturers that had traditionally been the backbone of the Midwestern economy began shedding jobs either through disinvestment, moving elsewhere, automating or outsourcing. Well-paying, stable employment opportunities throughout the Rust Belt continued to disappear. So, while the nation's periphery rebounded in the mid- and late-1980s, beginning a period of sustained growth, much of the Rust Belt was on the brink of disaster.

Researchers have long been cognizant of that fact that you cannot paint a picture of an area as large as the United States Rust Belt with just one broad stroke; doing so overlooks the many intricacies seen in a region as large and diverse as this. To be certain, there are a variety of uniting features that make this region a cohesive unit. Most of the Rust Belt is known for being in the heartland and near or on one of the Great Lakes, having strong agricultural roots or associations and long-standing ties to heavy industry. Yet, in spite of such important commonalities, the Rust Belt region is a surprisingly nuanced and complicated place. The Rust Belt includes parts of 8 different states, more than 100 metropolitan areas, and nine major metropolitan regions. Each state has its own political flavor, each city its own proclivities and each region its

own disposition, making it exceedingly complicated to understand the Rust Belt region and the parts that comprise it.

In order to uncover the complexities of the Rust Belt and its various interlocking parts, a deeper and more thorough investigation is necessary. In this chapter, a brief introduction to these regions is presented and certain common characteristics are noted. Then, in Chapter 5, a single case study of Detroit is presented. As it has long been the poster child of deindustrialization and the most obviously affected by contractions in manufacturing, the Detroit region is presented on its own first, and then again later on as one of eight regions. In Chapters 6 and 7, all eight case studies are presented and grouped according to the type of economic development response they employed. Processes and outcomes as they relate to adaptive resilience are discussed throughout Chapters 5, 6, and 7.

Before we analyze the responses seen in these eight regions, however, we must first better understand the economics, politics and demography of each individual region. It is to this task that we now turn. Since this is a story of regions transitioning from manufacturing, the eight regions will be presented in order from most dependent on manufacturing to least dependent on manufacturing, as measured by their manufacturing employment levels in 1970.¹⁰ A general discussion of each region will be provided first, followed at the end of the chapter by a preliminary discussion of commonalities across

¹⁰ The starting point of 1970 has been chosen because, for many of these regions, the early 1970s marked the peak of their manufacturing employment base.

cases and then some proposed quantitative metrics for adaptive resilience and ‘good outcomes.’

Eight Distinct Metropolitan Regions

No two Rust Belt regions are alike. Though similarities may exist in some instances, each of the following regions differs greatly in terms of size, political leanings, leadership base, assets, and constraints. Understanding how these regions differ in these and other ways is an important precondition for determining how they responded to the challenge of deindustrialization. As Table 3 attests, the eight regions included in this study varied substantially in terms of their dependence on manufacturing in general and within various key subsectors. We begin first with a brief discussion of Detroit, the most dependent on manufacturing of all eight regions.

The metropolitan statistical area of Detroit-Warren-Livonia includes the six counties of Lapeer, Livingston, Macomb, Oakland, St. Clair, and Wayne. In 2008, the region was America’s eleventh-largest and was home to 4.5 million people. Though these numbers have varied little since 2000, fluctuations during the previous century caused turbulent changes in Detroit’s population and its employment base. The region saw population losses in both the 1970s and the 1980s. The local economy has long been dependent on automobile manufacturing and is home to the “Big Three” automobile manufacturers: Chrysler, Ford, and General Motors. Though much has changed in recent years as these companies have modified both the techniques and locations of their production processes, Detroit remains an important location for both

automobile manufacturing and related support businesses such as parts, electronics and design suppliers (Klier and MacMillen 2005).

Table 3 - Regions by Manufacturing Dependence and Sector (1970)

Region	Manufacturing as percent of total employment (1970)	Sectoral strengths in the 1970s
Detroit	31.6	automobiles, transportation equipment
Milwaukee	31.4	machine manufacturing, industrial controls
Cleveland	31.2	primary metals, machine manufacturing, transportation equipment
Buffalo	29.9	steel, automobile parts
Cincinnati	28.3	consumer goods, machine manufacturing, transportation equipment
Pittsburgh	27.5	steel, glass, aluminum
Indianapolis	24.2	consumer electronics, industrial automation and instrumentation
Columbus	22.2	machine manufacturing, fabricated metals, food processing

The Milwaukee-Waukesha-West Allis metropolitan area was home to 1.5 million people in 2008. The Milwaukee region consists of four counties: Milwaukee, Waukesha, Washington, and Ozaukee. The region runs along the western border of Lake Michigan and at the confluence of the Menomonee, the Kinnickinnic, and the Milwaukee Rivers. Like so many of the other regions in this study, the Milwaukee region was originally settled because of its strategic location. Long known for its brewing and manufacturing, the region has faced substantial difficulty in the wake of deindustrialization but still remains a manufacturing-intensive economy. Early strengths in tool-making contributed to the region's specialization in machine manufacturing and industrial controls during the 1970s and 1980s. Population has remained relatively stable in the region, although it did see a slight decrease during the 1970s.

The Cleveland-Elyria-Mentor MSA had a population of 2.1 million people and was the 26th largest MSA in 2008. The region consists of five counties: Cuyahoga, Geauga, Lake, Lorain and Medina. During the early 20th century, Cleveland rose to prominence as a center of industry, particularly in steel manufacturing. The region's early success was due in part to its strategic location on the Cuyahoga River and Lake Erie, which helped to establish the city as an important manufacturing hub. Anchor industries during the 1970s and 1980s included primary metals, fabricated metals, non-electrical machinery, electrical machinery, and transportation equipment. Population within the region decreased significantly during the 1970s and 1980s but it has since begun to stabilize during the 1990s and 2000s.

The Buffalo-Niagara Falls MSA is a moderately-sized metropolitan region of approximately 1.1 million people in 2008. The region consists of two counties: Erie and Niagara, home to the cities of Buffalo and Niagara Falls, respectively. At the dawn of the 20th century, Buffalo emerged as an important location for grain storage, steel production, railroad and shipping commerce, automobile production and aerospace design and construction. As the original western terminus of the Erie Canal System, the region also saw substantial benefits from commerce associated with Great Lakes trade and transportation. These industrial and locational strengths, as well as inexpensive and plentiful hydroelectric power from the Niagara River, afforded the Buffalo region continued success throughout the first half of the 20th century. Employment losses in the steel industry, a significant part of the region's economic base

during the 1970s and 1980s, however, irrevocably harmed the region's economy in ways that can still be seen today.

The Cincinnati-Middletown MSA is a 15-county region spanning portions of the states of Indiana, Ohio and Kentucky. The region was home to approximately 2.1 million people in 2008. Industrial development within the region began during the second half of the nineteenth century. Much of this development benefited greatly from the strong transportation links afforded by the Miami and Erie Canal, a canal that was completed in 1845 and connected the region to Lake Erie. The canal, and later the railroads, gave Cincinnati a locational advantage in terms of shipping and transportation and also helped the region gain access to valuable raw materials. These two advantages, combined with a strong local demand for goods and a strong and skilled local workforce, helped the Cincinnati economy gain ground throughout much of the 19th and 20th centuries. Industrial strengths during the 1970s and 1980s included manufacturing of consumer goods, machinery, and transportation equipment. The region has since shifted away from heavy manufacturing and moved towards chemical and pharmaceutical goods, as well as financial services.

The Pittsburgh MSA was home to approximately 2.3 million people in 2008 and consists of six counties: Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland. Allegheny County, where the City of Pittsburgh is located, has long been considered the center of the region both politically and economically (Killikenny 1906). The Pittsburgh Region as a whole emerged as an industrial center based on its high-grade coal reserves in the mid-19th century and its dominance in the steel manufacturing sector

grew throughout the early 20th century (Clark 1989). By the late 1970s and early 1980s, job losses in manufacturing, many within the steel industry, were cause for great concern in the Pittsburgh region. Between 1980 and 1986, the region lost 115,000 manufacturing jobs with nearly 50% of these losses coming from the steel industry alone. The severity of this loss was somewhat masked by the relative gains seen in other non-manufacturing sectors, specifically in healthcare, education, technology and financial services (Detrick 1999). Overall, total regional employment decreased by 7 percent during this time period as Pittsburgh moved from a production economy to a service economy.

The Indianapolis-Carmel MSA is a nine-county region of approximately 1.7 million people in 2008. In the early- to mid-20th century, this state capital's economy largely revolved around government and heavy industry, including the manufacturing of pharmaceuticals and durable goods like motor vehicle parts and machine tools. Having consciously moved away from most of its manufacturing in the late 20th century, the Indianapolis economy today is more diverse, with specialties in health care, education, finance and education. Another major economic engine for the region is tourism, and specifically tourism related to sports and conventions.

The Columbus region was home to 1.7 million people in 2008. The metropolitan area includes eight counties and is the third-largest MSA in Ohio behind Cleveland and Cincinnati. Earlier manufacturing strengths include an emphasis on machinery, fabricated metal and food processing, which to some extent remain a small but important part of the region's economy today. As

Ohio's state capital, the region's economy is largely dominated by the public sector, including state and local government employees as well as employees working for The Ohio State University. As of October 2009, there were approximately 155,500 public sector employees, about 18% of all employees working in the region (BLS – Metropolitan Area Employment and Unemployment). Beyond a strong public sector, the region also has a very strong financial services sector - including numerous insurance and banking corporations – and a strong clothing retail base that has grown considerably in the last few decades.

Mapping Common Traits and Characteristics

Looking back at Table 2 and at the descriptions provided above we can begin making some preliminary observations about these regions. First, Table 2 shows that there is not a huge difference in manufacturing dependence between the most dependent region, Detroit (31.6%), and the sixth-ranked region, Pittsburgh (27.5%). While there is a natural breaking point between Pittsburgh and Indianapolis, all of the regions that were at least as dependent as Pittsburgh – meaning a dependence on manufacturing of 27.5 percent or more – experienced pretty similar difficulties during the 1970s and 1980s. Most of these regions saw substantial job losses in manufacturing, extensive fiscal challenges, and population stagnation or decline. Indianapolis and Columbus, on the other hand, which were comparatively less dependent on manufacturing, suffered considerably less during this deindustrialization period. Further insight about why regional outcomes may have differed will follow in Chapters 5 through 7.

One other thing we learn from these brief introductions is that among the more popular specializations were the manufacturing of steel, automobiles and other transportation equipment. Steel towns tended to fall in the middle of the spectrum, in regions having dependence on manufacturing somewhere around 27 to 29 percent. Automobiles and transportation equipment were seen in Detroit, the most dependent, and in Cleveland and Cincinnati, which both exhibited mid-range manufacturing dependency. Higher-technology types of industrial strengths tended to be seen in regions on the lower end of the manufacturing dependency spectrum, most notably in Indianapolis, and to some extent in Columbus.

A simple listing of industrial strengths tells us only about the composition of each region's economic base but when we map these strengths against more detailed information about the size of these industries over time, this information becomes inherently more useful. Figure 3 depicts changes in the size of these manufacturing subsectors in the United States from 1969 – 2003. Featured in this chart are the main industrial strengths of the eight case study regions. Mapping the changes in each subsector over time adds a temporal dimension to our discussion of economic change.

Because different sectors were affected by deindustrialization in different ways and at different times, we can imagine that each region, depending on their particular specializations, would experience deindustrialization differently. For instance, if we look within the period of interest, say 1973 to 1989, the earlier warnings occurred in transportation equipment and primary metals, both of which also saw little recovery during the late 1970s and early 1980s. One

would expect then that regions that depended on these sectors for their livelihoods may have reacted earlier than regions where other, less-affected or later-affected industries were dominant. In the case of transportation equipment, we might expect to see earlier responses from Detroit, Cleveland and Cincinnati.

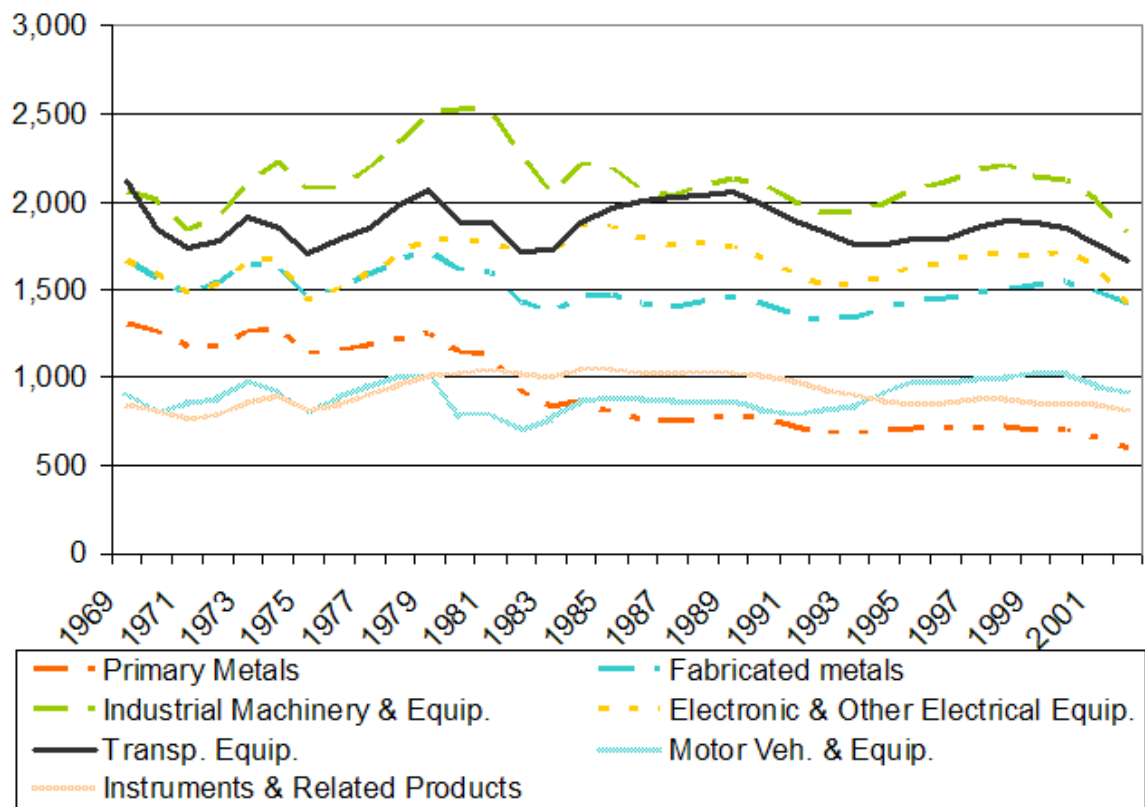


Figure 3 - National Employment by Subsector (1000s of jobs, SA), 1969 – 2003

Or, in the case of primary metals, we might expect to see early responses in Cleveland, Buffalo, and Pittsburgh. Though the nature and timing of specific regional responses will be discussed later on, it is useful here to begin thinking about the unique experiences of each of the eight case study regions. To that end, we continue exploring quantitative measures of these regions below.

Adaptive Resilience: Response and Recovery

Now that we know some of the important compositional characteristics of these eight regions, it seems useful to begin looking at how these regions fared, quantitatively, vis-à-vis some simple measures of regional resilience and hypothetical ‘good outcomes.’ In her case study of Buffalo, Foster (2010) proposed two main ways of looking at adaptive resilience in the case of slow-burning crises. Though Foster said nothing about ‘good outcomes’, she did differentiate between response and recovery resilience, asking how a region responded to a given challenge and how well it recovered from that challenge over time. For the Buffalo case study, Foster presented a number of standard measures for two separate time periods. First, she examined figures from the 1970s and 1980s to determine how well the region responded to deindustrialization. Next, she examined figures from 1989 to 2000 to determine how well the region performed in the recovery phase. To gauge the region’s relative performance, figures for Buffalo were compared to other regions in the state of New York, and other regions of similar size and industrial composition. Ultimately, she concluded that both Buffalo’s response resilience and recovery resilience were comparatively low, which would suggest a lack of ‘good outcomes’ for the region. Below, I borrow from this framework to conduct an initial quantitative assessment of the eight case study regions.

Table 4 - Selected Characteristics of Eight Case Study Regions in the Response Period (1969 – 1989)

		Pct. Population Change		Pct. Employment Change		Per Capita Income		Poverty			
Region	Manuf. as Percent of Total Empl. (1970)	1969-1979	1979-1989	1969-1979	1979-1989	1989(\$)	Pct. Chg. 1969-1989	Rate (1970)	Rate (1990)	Central City to Suburbs Ratio (1970)	Central City to Suburbs Ratio (1990)
Detroit	31.6	-0.7	-2.4	9.7	7.9	\$15,649	35.0	8.4	13.0	2.2	2.4
Milwaukee	31.4	-0.4	2.5	20.6	6.2	\$14,785	34.6	7.8	11.6	1.0	7.1
Cleveland	31.2	-6.5	-3.1	6.2	0.8	\$15,092	31.6	8.8	11.8	1.6	1.6
Buffalo	29.9	-7.9	-4.3	3.8	5.1	\$13,403	33.3	9.0	12.0	2.4	2.6
Cincinnati	28.3	9.5	5.1	18.0	16.8	\$14,401	42.6	10.7	11.5	2.0	0.8
Pittsburgh	27.5	10.3	-6.8	8.2	-0.6	\$13,785	39.1	10.1	12.1	4.3	0.3
Indianapolis	24.2	9.0	7.1	18.9	18.3	\$14,936	40.1	8.6	9.5	0.1	3.1
Columbus	22.2	38.5	10.7	27.8	21.4	\$14,537	43.5	10.3	11.8	0.7	2.1
Mean	28.3	6.5	1.1	14.2	9.5	\$14,574	37.5	9.2	11.7	1.8	2.5

Table 4 summarizes the performance of the eight case study regions using Foster's (2010) measures of *response* resilience, namely in terms of population change, employment change, per capita income, and poverty in the 1970s and 1980s. In order to gauge each region's relative performance, the mean for all eight regions is also provided. Those regions that performed worse than the mean for the group on any given measure are marked in bold.

Among the more obvious observations seen in Table 4 is the correlation between manufacturing dependence and below-average performance across most indicators. Regions in the top half (meaning most dependent on manufacturing) are more likely to fall below the mean than those regions in the bottom half. Detroit, the most dependent on manufacturing, was below the mean on every indicator except per capita income, which implies that if you were lucky enough to have a job there, your income was probably above average. Milwaukee, just behind Detroit in manufacturing dependence, was below average across many measures; notable exceptions include major employment growth between 1969 and 1979, as well as modest population growth between 1979 and 1989. Among the more manufacturing-dependent regions, Milwaukee performed slightly better than expected. Despite being below the mean on many measures, the Milwaukee region did see population growth in the second half of the response period and modest growth in employment in both portions of the response period.

Indicators for Cleveland and Buffalo paint a pretty dismal picture; Buffalo fell below the average across all measures except poverty, while Cleveland fell below on all but per capita income and poverty. Again, these findings suggest

that there was little, at least quantitatively, to suggest the presence of ‘good outcomes’ in these regions.

Like Detroit, the Cleveland per capita income measure suggests that remaining jobs paid pretty well in the region. In Cincinnati, the opposite was true – it performed surprisingly well, and above average on all measures *except* per capita income. Therefore, the kinds of jobs that were in Cincinnati, although comparatively stable, probably did not pay as well as in other Rust Belt regions. Below average per capita income was also apparent in Pittsburgh, as was population decline in the second half of the response period and employment throughout. In these regions, there were some but not many ‘good outcomes’, which suggests that these region’s had mixed results in their navigation of the deindustrialization challenge.

Two regions that exhibited greater success in navigating the trials of deindustrialization were Indianapolis and Columbus. Quantitatively, both regions fared much better than their counterparts, displaying above average scores across all indicators except for below-average per capita income and above-average poverty in Columbus.

Overall, these relatively simple indicators of response resilience suggest that manufacturing dependence likely did matter. Regions where manufacturing dependence was pronounced generally performed poorly on most of Foster’s (2010) key response indicators and did not produce many ‘good outcomes.’ In other words, the degree to which your economy was rooted in manufacturing likely played an important role in how much response resilience you exhibited

and how well you navigated the adaptive resilience cycle. However, aberrations certainly abound. The relatively solid performance of Cincinnati, which basically started with average manufacturing dependence, encourages additional explanation. Pittsburgh, with its relatively low manufacturing dependence, performed surprisingly low on measures of population, employment, and per capita income. Further explanation of these and other remaining questions about regional responses to deindustrialization will be explored in the remaining chapters.

Shifting gears, Table 5 summarizes elements of regional resilience for the *recovery* period, or the 1990s decade which followed two decades of decline. Again, quantitative indicators for various measures across all eight regions are presented. The goal for this post-deindustrialization assessment is to identify those regions that performed well on various standard economic indicators, determine the extent to which each region experienced ‘good outcomes’ in the recovery period, and raise questions for the remaining analysis.

The findings from Table 5 suggest that manufacturing dependence within the eight regions has decreased dramatically since 1970 but the overall rank of each region in that regard remains largely unchanged. This continuity in ranking suggests that, even though manufacturing had contracted across the board, it still mattered most in the regions where it had always had a strong presence. More importantly, it also hints at the possibility that a manufacturing legacy is generally a strong legacy and one that is perhaps quite difficult to move away from. A more thorough discussion of the challenges associated with a manufacturing legacy is provided in subsequent chapters.

Table 5- Selected Characteristics of Eight Case Study Regions in the Recovery Period (1989 - 2000)

Region	Manuf. as Perce nt of Total Empl. (2000)	Pct. Population Change	Pct. Employment Change	Per Capita Income		Poverty	
		1989-2000	1989-2000	2000(\$)	Pct. Chg. 1989- 2000	Rate (2000)	Central City to Suburb s Ratio (2000)
Detroit	18.1	4.8	15.3	\$24,275	15.8	10.6	1.9
Milwaukee	17.5	4.8	15.6	\$23,003	16.2	10.4	5.3
Cleveland	15.9	2.2	12.2	\$22,319	10.4	10.6	1.4
Buffalo	13.6	-1.6	3.0	\$20,143	12.2	11.9	2.4
Cincinnati	13.5	8.9	24.1	\$22,947	19.0	9.5	0.7
Pittsburgh	10.4	-1.5	12.5	\$20,935	13.4	10.8	0.3
Indianapolis	11.8	17.8	30.6	\$23,198	16.0	8.6	2.7
Columbus	9.9	14.8	29.4	\$23,020	18.2	10.1	2.1
Mean	13.7	6.8	17.8	\$22,713	14.6	10.3	2.1

Another important conclusion that can be drawn from Table 5 is that many of those same underperformers from the response period remain below average in the recovery period as well. Detroit, Milwaukee, Cleveland and Buffalo remained relatively consistent underperformers across most of these resilience measures, suggesting a lack of ‘good outcomes.’ Cincinnati continued to walk the middle ground and Pittsburgh underperformed on most measures, despite a much lower manufacturing dependence than the other underperformers. Some of the interesting changes seen between response and recovery are the double-digit population growth seen in Indianapolis and Columbus and the exceedingly high employment growth seen in Cincinnati and Indianapolis. Also, somewhat surprisingly, Milwaukee, Cincinnati and

Columbus all saw their per capita income standings shift from below the mean to above it during this time period.

Conclusion

All of these shifts - for better or worse - suggest that fortunes may have changed for some of these regions between the response and recovery periods. This then begs the question of whether or not these shifts had anything to do with the individual region's response or whether it was purely luck that changed certain regional outcomes. As was also true in Foster's case study of Buffalo, we are left with many questions about the adaptive resilience of regions. Namely, we are left wondering about the specific responses crafted in each of these regions, the efficacy of those responses in the long run, and the relationship between these responses and 'good outcomes' in the eight case study regions. We must also ask what resources were available in each case to help with the response and subsequent recovery. Even more importantly, we must ask who was responsible for crafting these responses, what were their intentions, and how did they decide upon their response, or in some cases non-response?

Armed with the initial findings provided above and fueled by these unanswered questions, further exploration of these regions, and the economic development responses they developed in the wake of deindustrialization, will follow below. The goal for the next three chapters is to marry what we now know, quantitatively, about the responses and recoveries seen in these regions with a series of qualitative accounts of what happened in each. Together, these findings will help us to better understand regional resilience in the context of

these eight regions. We begin first with an in-depth examination of the most complicated region: Detroit, Michigan.

CHAPTER 5

Detroit: The Perils of 'Betting on the Basics'

In this chapter, we turn to America's most salient example of deindustrialization: Detroit, Michigan. As the historical epicenter of American automobile manufacturing, the Detroit metropolitan area has long grappled with economic stressors both small and large. In general, economic downturns in the United States economy have tended to hit harder and last longer in Detroit than in many other metropolitan areas (FDIC 2009). One of the most important downturns in recent history began with a brief recession that occurred between January 1980 and July 1980 and was then quickly followed by another that lasted from July 1981 through November 1982 (NBER 2009). In Detroit, where the majority of US auto manufacturing jobs were located, these recessions proved extremely challenging and prompted a variety of responses from the private, public and non-profit sectors.

Overall, the findings outlined below suggest that the response seen in Detroit aligned most closely with what Markusen and Carlson (1988) would call, 'Betting on the Basics.' The findings also suggest that the region remained in the conservation and release phases of the adaptive resilience figure-8 for a prolonged period of time. Though the regional economy as a whole exhibited low levels of resilience during this time period, there is evidence of 'good outcomes' along other, less-traditional means. An analysis of this region's response and its corresponding results as it contributed to or detracted from Detroit's regional resilience is the subject of this chapter.

In a slight divergence from the multi-N approach seen in later chapters, a single case study approach is used here because of the truly exceptional nature of the Detroit region. What makes the story of Detroit so unique, and so worthy of the deep inquiries provided by a single case study approach, is the region's role as the symbolic headquarters of the American automobile industry as well as the region's severe and prolonged poor economic performance and protracted racial segregation. In order to uncover a more detailed understanding of Detroit's unique position, I begin this chapter by briefly exploring Detroit's recent economic and social history. I then identify the important stakeholders at play in Detroit during the period of interest. Using qualitative data collected through interviews with many of these stakeholders, I then explore the ways in which local leaders contributed to the development of a response to this challenge. I conclude by asking how these local decisions did or did not contribute to adaptive resilience in the Detroit metropolitan region as a whole and the smaller areas of which it consists.

Detroit's Economy and Society

In 1900, approximately 500,000 people lived in the Detroit MSA. Following two decades of significant growth, the total population reached 2.3 million in 1930 and continued to climb to a high of nearly 4.5 million in 1970 (See Figure 4, SEMCOG 2002). Population losses in the 1970s and 1980s, primarily a byproduct of the economic restructuring that the region experienced during that time, resulted in a slight decrease in the total population – to 4.2 million people in 1990 - at a time when many other regions across the United States were growing (Ibid). In recent years, that trend has reversed once more and

population has increased again to its former high of 4.5 million people. Much of this resurgence is due to increased population in the suburbs, which means that the region as a whole has gained in recent years despite the principal city's loss of nearly 500,000 residents since 1980 (Ibid).

As the home to the “Big Three” automobile manufacturers (Chrysler, Ford, and General Motors), the local economy was historically been dependent on automobile manufacturing (See Table 6). Though significant losses in this industry have been detrimental to the region, Detroit remains an important location for both automobile manufacturing and related support businesses such as parts, electronics and design suppliers (Klier and MacMillen 2005). In Detroit, the transportation equipment manufacturing companies employed more than 150,000 people in 2007, a little more than 8 percent of the region's private sector jobs (Armstrong 2007). As Table 7 attests, these jobs represent a larger share of the Detroit area employment and pay substantially higher wages in Detroit than the national average. The higher concentration of these types of jobs means that changes in the economy that affect the broader automobile industry disproportionately affect the Detroit region (Ingrassia and White 1995).

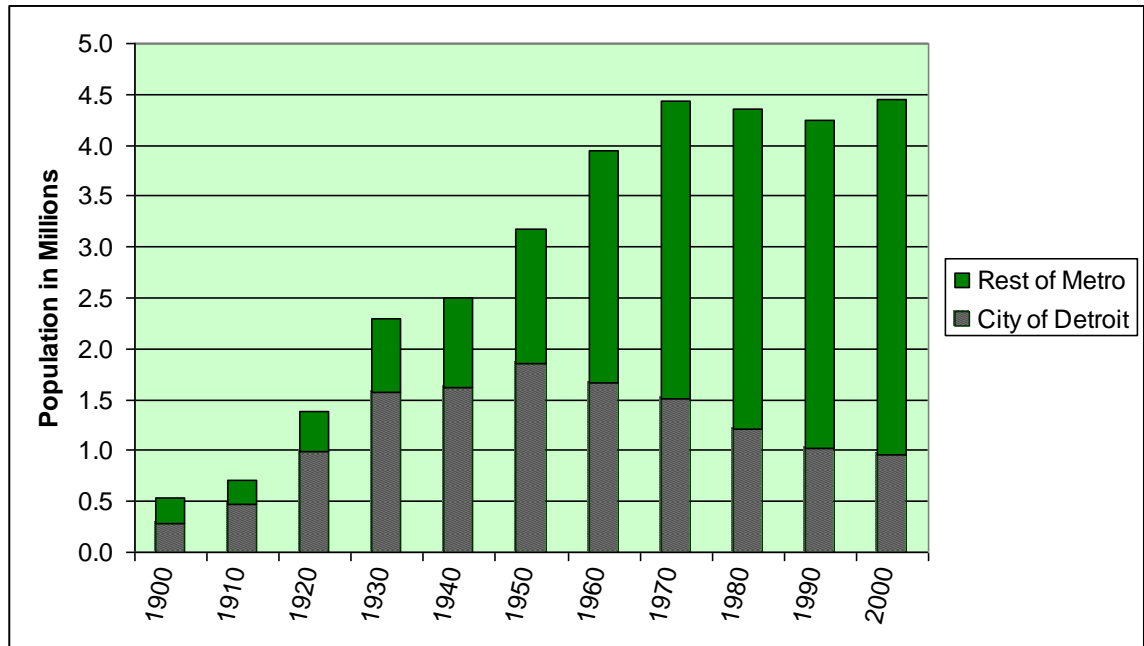


Figure 4 - City of Detroit and Metropolitan Detroit Population, 1900-2000 (SEMCOG 2002)

Table 6 - Major Employers in Detroit MSA, 2007 (Source: Crain's Detroit Business)

Company	Employees
Ford Motor Company	55,342
General Motors Corporation	52,861
University of Michigan	33,374
Chrysler LLC	32,597
Detroit Public Schools	17,329
U.S. Postal Service	15,385
U.S. Government	15,328
Henry Ford Health Systems	15,139
St. John Health	14,286
City of Detroit	13,762

Table 7 - Occupational Employment and Wages by Major Occupational Group, United States and Detroit-Livonia-Dearborn Metropolitan Area, May 2007 (BLS 2008)

Major Occupational Group	Employment share (in percent)		Mean hourly wage (in dollars)	
	US	Detroit	US	Detroit
Production	7.6	8.5*	15.05	20.93*
Transportation and material moving	7.2	8.4*	14.75	19.48*

** = The employment share or mean hourly wage for this area is significantly different from the national average of all areas at the 90 percent confidence levels.*

The extent to which the Detroit region relied on the automobile industry became increasingly clear during the 1970s. Despite warning signs in the past, the recession of 1969-70 and the energy crisis of 1973 affected the Detroit region significantly. A sharp drop in demand for large American cars, coupled with the rise of foreign automobiles, meant that Detroit's automobile industry had to innovate or make significant changes in order to stay competitive. Therein lies the complexity of the Detroit case; in search of lower costs and higher quality products, many automakers either introduced labor-saving technologies to their production facilities or moved production facilities to other lower-cost regions, which generally resulted in significant job losses for the Detroit region.

The integration of automation technologies continued through the 1980s and 1990s, generally increasing productivity and efficiency, while simultaneously causing record-high outputs of motor vehicles and a widespread reduction in the number of automobile workers needed (Farley et al. 2000). Further complicating the matter is the fact that Detroit also felt the effects of an

emerging geographic shift in production during this time period. Between 1950 and 1970, Detroit's share of national automotive employment decreased from 35 to 20 percent, as corporations looked to other, less expensive parts of the country and world for their production facilities.

Coinciding with this national and international shift was a shift within the region that would greatly change the profile of the city and its suburbs; during the 1980s, employment in Wayne County fell (-4.3%), while the suburban counties and the metropolitan area as a whole saw an increase in employment (38.5% and 15.6%, respectively) (County Business Patterns 2003). During the 1990s, job losses within Detroit tapered off but employment in the suburban counties and in the metropolitan region as a whole continued to grow (30.4% and 17.1%, respectively) (Ibid). Suburban prosperity is so pronounced that metropolitan Detroit continues to be a high- income region (the per capita income was \$52,004 in 2006), despite the alarmingly high poverty rate (23.1% in 2006) in the central city (US Census).

This economic disparity within the region in many ways mirrors the racial disparity and segregation that also can be seen across the region. There are large differences seen between the central city and its suburbs that often get lost in aggregate indicators. Suburban communities are primarily residential and have many common characteristics. Homeownership in these communities is prevalent and rental housing scarce. There is little public transportation, car ownership is high, and suburban commuters have long been accustomed to extended commutes (Glazer 1965). A demographic tide of suburbanization and discriminatory practices in both housing and lending

keeps many African-Americans confined to the city (Cohen and Dawson 1993; Thompson 2001; Sugrue 2005). Residents of the largely white suburbs like Warren, West Bloomfield and Farmington Hills experience a higher than average employment rate and a higher per capita income than many parts of the United States. On the other hand, residents of the central city of Detroit are overwhelmingly black and are often the city's most impoverished residents (Darden, et al. 1987).

Such shifts highlight the fact that in Detroit there has long been tension between corporations seeking to increase profits and local leaders who want to keep people employed in good, high-paying jobs. As this research will demonstrate below, the Detroit region is an interesting case because the region ultimately failed in two main ways. First, Detroit's large automobile corporations have not typically remained internationally competitive despite changes in their production techniques. Second, local leaders were largely unable to prevent the disappearance of high-paying jobs due to relocation or the substitution of capital for labor (automation). Together, these two challenges remind us that deindustrialization is an interesting long-term crisis because it caused a massive readjustment to Detroit's employment trajectory and it presented leaders with a series of very difficult decisions to make about how to respond.

Stakeholders

In Detroit, there were four main groups of actors who made decisions about how to respond to deindustrialization: politicians, including city, suburban and regional officials; leaders from the private sector; labor leaders; and civic

groups, such as activists and social service providers. Selected individuals from each group contributed to the development of an economic development response, albeit a somewhat disjointed one.

As one might expect, politicians were among the most vocal groups involved in the decision-making process. Among the politicians, one of the primary players was Detroit's Mayor Coleman Young (1973-1994), who was known for his "corporatist governing structure ... (oriented) around the city's downtown renaissance agenda" (DiGaetano and Lawless 1999: 559). Detroit traditionally has had a strong mayoral system, so Young played a very important role in crafting a plan for the city, and to some extent the region. To that end, Young did have a series of successes including the creation of the Detroit Economic Growth Corporation, Downtown Development Authority, Economic Development Corporation and various built projects (Bachelor 1998). However, the effects of the recessions and federal cutbacks in the late 1970s and early 1980s ultimately limited what he was able to accomplish (Thomas 1990).

Among government agencies, one of the main groups to be part of the conversation at the regional scale was the Southeastern Michigan Council of Governments (SEMCOG), a membership organization of local governments in Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw and Wayne Counties. The group bills itself as a regional collaboration of local elected leaders working to solve regional issues that transcend individual governmental borders. As the region's designated Metropolitan Planning Organization, SEMCOG is responsible for regional transportation planning. It

should be noted that SEMCOG was fraught with many of the same problems of other COGs and never really gained the clout necessary to enforce cooperation (Thomas 1990). Nevertheless, SEMCOG government members and staff were often vocal participants in the decision-making process.

Other important political voices of this time period include Governors William Milliken (1969-1983), a moderate Republican, and his successor, James Blanchard (1983-1991), a Democrat. Despite their opposing political viewpoints, both Blanchard and Milliken were seen as sympathetic to automobile corporation interests who would do anything in their power to keep these corporations in Michigan, and mainly in the Detroit region. Suburban officials, who were more likely to be Republican, were also important members of the decision-making process. One of the main Republican voices in Oakland County, is now-County Executive Brooks Patterson. Though Patterson did not take office as County Executive until 1993, he has long been a vocal and sometimes controversial figurehead for this wealthy suburban county. He has publicly acknowledged his pro-business, pro-sprawl beliefs. During the 1970s, he worked in the Oakland County Prosecuting Attorney's office, where he led the protest against court-ordered cross-district busing. Given the pro-business orientation of many of these public officials, it is not surprising that corporate executives were generally given a pretty significant say in how the region would respond.

Corporate executives that participated in the regional recovery process primarily came from the Big Three and related automobile businesses, as well as from regional banks and other service-sector entities. The Detroit Regional

Chamber was the main regional business organization and one of the largest and most powerful Chambers of Commerce in the country. It represented businesses throughout the 10-county region of southeast Michigan, focusing its efforts primarily on business investment and attraction, workforce development, and public policy advocacy on behalf of member businesses. The Chamber, along with another business group, Detroit Renaissance, generally represented the white, corporate elite interests (Jo 2002). Other business-led groups, like the Detroit Economic Growth Corporation and New Detroit, which were designed by Mayor Young and his supporters, were sometimes criticized for being “a forum for articulating the black agenda” (Rich 1989, 81). To his credit, Mayor Coleman worked closely with most of these groups, regardless of their racial or political orientation. These close associations all but guaranteed that business interests were an important, if not overarching, consideration of any economic development strategy crafted during this time period.

The main labor representation in the Detroit recovery process came through the United Auto Workers (UAW), one of the largest labor unions in North America. Though the UAW has since seen a dramatic decline in membership since the automobile manufacturing sector’s restructuring began in the 1970s, Detroit is home to the UAW and has long held the reputation of being a union town. Initially, the UAW’s involvement in regional issues generally put them on the defensive, as they deflected criticism about the high cost of doing business in Detroit. Over time, however, the UAW and other unions became involved in attempts to marry economic development efforts with workforce development

efforts, ultimately becoming an important player in the decision-making process.

One of the most important civic groups to emerge during this time period was the Detroit Alliance for a Rational Economy (DARE), an activist group that focused on issues of economic development and corporate subsidies. This group of local professionals and activists questioned the usefulness of on-going economic development practices and proposed alternative scenarios for redevelopment in Detroit. They were largely peripheral members of the regional dialogue until one of their members, Ken Cockrel, was elected to the Detroit City Council in 1977. While in power, Cockrel gave voice to a growing contingent of marginalized activists in Detroit and utilized his supporters' local knowledge to suggest progressive strategies for moving the region forward.

In their own ways, these four main groups of actors helped to create an economic development response, or series of responses, in the Detroit region. Though the extent to which each person or group contributed to that response certainly varied, all played a role in the crafting of the region's response and acted as stewards for the region as it moved forward. What follows below is an analysis of the process by which this response was crafted as described by interviewees in this study.

Efforts to Respond

Within Detroit, reactions to, and ideas about the cause of, the unfolding economic shift varied greatly. Local leaders, as well as the academic community, debated the nature and extent of this industrial shift (Bluestone

and Harrison 1982; Lawrence 1982; Branson 1983). One interviewee, a state employee with the Department of Management and Budget during the 1970s and 1980s, described the uncertainty that unfolded as early reports about job losses trickled in.

“In the early 1980s, our field staff would come in with stories about GM and Ford, Chrysler closing a plant here or there and the potential impact. But again they were still doing so well; we didn’t take it as a crisis. We knew there were looming issues but nobody thought the automobile industry would be in the shape that it is today, at that time. No one could believe it because they were so dominant with well over 50% of the market share in the 1980s. There was just not a feeling that that would lessen to the degree it has.”

Another state official working within the Department of Commerce echoed these sentiments, noting that most people were not prepared for what unfolded in Detroit during the 1980s and beyond.

“I think few if any of us had any idea as to just how rapidly this would progress in the 80s, 90s and into the 21st century. I don’t think any of us saw that what was happening would result in the beginning of the 21st century being a transition from manufacturing to high-technology, knowledge-based and information industries just as the previous century had seen the shift from agriculture to manufacturing. I think if you go back and compare... it is very similar to what happened at the beginning of the 20th century but I don’t think we saw it at that point. I think we saw symptoms, but we weren’t sure where it was going to lead us ultimately.”

Having failed to reach any real consensus on the nature and extent of the industrial shift, local leaders devised a variety of strategies to combat associated job losses and relocations. Like many other manufacturing-dependent regions, local leaders in Detroit found that deciding which avenue to explore was not easy; it was a difficult task that many interviewees recall grappling with at the time. One interviewee, a former employee of SEMCOG, described the ongoing debate within his organization.

“We had a lot of conversations centered around the question of whether we should throw all of our energies into saving the automobile-related jobs or put money behind other types of attraction strategies. In many ways, I think we all wanted to do both. But convincing ourselves that a combination of both was a good idea was a difficult task that I don’t think was ever resolved.”

The quandary that this participant describes is quite telling in that it summarizes the confusion about what could or should be done to ameliorate the problems that Detroit was experiencing.

One way to sift through this confusion and begin to identify common threads in the wake of these challenges is to categorize the responses described by each interviewee. If we categorize the responses that interviewees described using the typology created by Markusen and Carlson (1988), we find that a range of approaches and ideologies were employed (see Table 8). Of the 27 interviewees that were conducted in Detroit, 13 people described responses that either explicitly or implicitly subscribed to the ideology of ‘Betting on the Basics.’ Seven people subscribed to the ‘Bidding Down’ ideology, meaning that their efforts emphasized the cultivation of a lower cost climate in which to conduct business. Five interviewees described strategies of reinvention and diversification, which largely aligned with the ‘Bowing Out’ approach. The two remaining interviewees described strategies that aligned with ‘Sharing the Wealth’, Clavel and Kleniewski’s (1990) service sector-based strategy of linkage and redistributive policies.

Though the viewpoints offered by local practitioners generally correspond to one of the typological categories, the overall range of responses mentioned offers a spectrum of options employed by these localities. Economic

development actions that fall within the category of ‘Betting on the Basics’, which constitute the majority of the responses described by interviewees, are described first.

Table 7 - Interviewee Responses by Ideological Approach

Economic Development Approach	Number of Interviewees
‘Betting on the Basics’	13
‘Bidding Down’	7
‘Bowing Out’	5
‘Sharing the Wealth’	2

‘Betting on the Basics’

Remaining steadfast in their belief that the manufacturing sector would ultimately rebound and employment in that industry would eventually resume former trajectories, leaders who subscribed to the ‘Betting on the Basics’ approach tended to focus on indigenous entrepreneurship and retaining existing heavy manufacturing firms. Associated economic development efforts, accordingly, targeted existing heavy industry, rejecting arguments in favor of the “sunrise industries.” Rather than invest in new and emerging sectors, proponents of the ‘Betting on the Basics’ approach placed greater emphasis on retaining and expanding the existing industries, ignoring calls to diversify their industrial structure. As the figure-8 diagram suggests, the rigidity of this approach prolonged the Detroit region’s conservation phase, a time in which stability is a higher priority than innovation. One Detroit-area academic with extensive knowledge of the ways in which localities responded to early warnings of the unfolding industrial shift found that:

“Michigan stakeholders didn’t believe in industrial decline. They were a victim of their largeness and thought that they were immune to global

fluctuations. Stakeholders were much more concerned with stretching their global tentacles than worrying about the threat of economic problems here in Detroit.”

Though the respondents’ reasoning sometimes differed, the sense of immunity and concern for increasing global market share was echoed by numerous interviewees. A former planner for the City of Detroit simply stated that, in response to economic changes, “non-action was the order of the day.” This non-action may have only referred to the corporate-sector mentality of the time. While the Big Three were hesitant to publicly acknowledge the industrial shift that seemed to be taking place, many of the other public stakeholders were not so timid in recognizing the impending challenges.

Within the city administration, the unfolding industrial shift was of great concern. One former official in the Department of Economic and Community Development noted that, in some ways, local leaders were galvanized by the threat of industrial extinction. Despite widespread recognition that the automobile industry was shrinking, the official described efforts – on the part of both public and union leaders – to willingly “reinforce an industry that was slowly getting smaller.” This interviewee was not alone in expressing frustration at this conservative retention strategy. Numerous other interviewees mentioned their own misgivings about “committing too strongly to a recreation of history.” Such fears were echoed in sentiments expressed by another interviewee – an activist working in Detroit during the latter half of the 20th century – who reflected on the questions he was asking about the prevailing economic development strategy of the time.

“In a funny way, particularly in the late 1970s, there was very little emphasis on the workforce development issue. At first the issues were on tax abatement—...in Michigan it was called Public Act 198—and a

lot of the questions around economic development issues revolved around what sorts of tax write-offs were given to companies as inducements to settle their large plants in the area.”

Despite such gloomy predictions, some local leaders were actually quite creative in thinking about how to respond to economic change. Rather than concentrating solely or predominantly on the retention and expansion of existing heavy industry – economic development strategies that Markusen and Carlson would call ‘Betting on the Basics’ –many leaders instead focused their efforts on ‘turning the corner’ by making Detroit a lower-cost place for companies to conduct business, a collective set of strategies known as ‘Bidding Down.’

‘Bidding Down’

Interviewees that subscribed to the ‘Bidding Down’ approach – the second most popular ideology - frequently discussed the need for public spending to create a good business climate for entrepreneurs, new business start-ups, and existing firms. Proponents of this approach saw an uncompetitive cost structure as the chief obstacle standing between the Detroit region and economic prosperity. They believed that revitalization of the Detroit economy’s basic industry would come from the resolution of costly labor-management conflicts such as artificially high wages, inefficient work rules, and unnecessarily high workman’s compensation and unemployment insurance costs. Proponents of the ‘Bidding Down’ approach, perhaps in an attempt to ‘turn the corner’ and move towards the release phase, focused their efforts on lowering these costs, utilizing tools like givebacks and negotiated public and

private concessions in order to give businesses incentives to make investments and create jobs in the region.

Within the Detroit metropolitan region, the suburban county of Oakland was well known for providing subsidies to firms in order to create a lower cost business environment. A former Oakland County Executive described his efforts as follows:

“We have a program, Emerging Sectors, underway to complement the automotive industry. So far, we’ve brought in or expanded 906 companies that fit within that paradigm, and we have invested millions of dollars and created about 1300 new jobs. But frankly, we’re losing them by the tens of thousands and replacing them by the 500s.”

Like so many of the local public actors who subscribed to the ‘Bidding Down’ approach, this interviewee focuses on establishments and jobs, and not necessarily on Big Three market share, gross regional product, or quality of life. Because his main diagnostic appears to be job creation, it is unsurprising that he highlights the importance placed on economic development incentives, typically known as industrial expansion and attraction strategies. Such strategies represent the epitome of the ‘Bidding Down’ response to the industrial changes that were taking place.

One interviewee, a state leader from the Department of Commerce, noted that from the State of Michigan’s perspective, the approach was to “give (firms) a lot of tax write-offs, and that’s the most important thing.” Interviewees also noted that the city’s approach was not all that different. A former staff member of the Economic Growth Corporation noted that,

“The Big Three, either directly or indirectly, made a lot of the decisions about how economic development would proceed. For the most part,

they made it clear they would only stay in Detroit if their interests were served.”

Though not all economic development efforts prioritized such regressive retention strategies, it often felt that way. An activist working within Detroit during the 1980s described the combination of both fear and frustration that he felt with this approach.

“The newspaper headlines, day after day, would say that an agreement had been reached to save so and so number of jobs from moving to Mexico. But at what cost? Where was the money coming from and who was losing out?”

The activist was not alone in expressing his frustration at this relatively popular response to deindustrialization in Detroit, numerous other interviewees were disappointed with this approach. In addition to ‘Bidding Down’, which was the second most popular economic development strategy behind ‘Betting on the Basics’, local actors also considered two other approaches, albeit to a lesser extent.

‘Bowling Out’

One of the less popular options was the ‘Bowling Out’ approach, which Markusen and Carlson (1988) describe as industrial diversification through the attraction of service sector jobs and high-tech firms. Leaders who subscribed to this ideology frequently mentioned the importance of targeting firms that were not focused on automobile manufacturing. Interviewees who believed in ‘Bowling Out’ were therefore more likely to support initiatives focused on firms that were part of Thurow’s ‘sunrise industries’, industrial sectors that were growing quickly and were expected to become even more significant in the post-industrial economy. In their own way, these attempts to redirect the

economy were attempts at ‘turning the corner’ by moving beyond the rigidity of the conservation phase and into the creative destruction of the release phase. The success rates of this approach varied significantly across the region.

Numerous interviewees mentioned Macomb County’s successful attraction of firms that were not directly associated with automobile production. One long-serving public official in Macomb County described early efforts to diversify their industrial base.

“I had a sense that automotive was not going to send us to the promised land, so we started to focus our efforts outside of auto manufacturing, on emerging sectors like robotics, IT, biotech, alternative energy, healthcare, finance, and today on homeland security.”

What began as a series of scattered investments in alternative industries has since evolved into comprehensive targeted development strategies in Macomb County and in other areas of the Detroit region. Such development strategies have increasingly focused on sectors whose success would yield higher GRP, like robotics and biotech, and create more jobs, like healthcare and finance. Another interviewee, this time in the Oakland County Executive’s Office, noted that avoiding an over-reliance on the automobile industry remains an important priority still today.

“We are trying to promote our strengths.... We have 93,000 people in the healthcare industry in Oakland County, second only to automotive. As automotive fades, we think that healthcare is going to become an area of economic development that goes beyond this region.”

With only 5 interviewees subscribing to this approach of industrial diversification and service sector growth, the ‘Bowing Out’ approach was certainly not the predominant ideology. Even less popular was the ‘Sharing

the Wealth’ approach, which utilized more progressive strategies embracing the redistribution of service sector growth.

‘Sharing the Wealth’

The two interviewees subscribing to the ‘Sharing the Wealth’ ideology – one city union official and the other a staff member at SEMCOG – described their attempts to leverage growth in the service sector through linkage policies. They focused primarily on the development of policies and practices aimed toward labor and community groups rather than the corporate sector. They focused their efforts on developing linkage policies for the redistribution of service sector growth benefits to improve the greater community. Because it was considered a fairly progressive approach in the 1980s, this approach was less often utilized than the other, more mainstream approaches. A manager in the Department of Commerce during the early 1980s described the tension between development and the greater community as follows:

“You can’t just talk about the tax impact on a given company or given industry, you have to talk about the whole range of societal needs—housing, neighborhoods, communities, schools, transportation, healthcare—you can’t take any of those out of the equation and successfully address the problem of corporate attraction and population retention.”

It should be noted that many of the people who needed these improvements the most were part of the inner-city, disenfranchised population of Detroit who had little ability to pay for these amenities. In the meantime, many people with the ability to pay, generally higher-income suburban residents who never really had to see the day-to-day hardships of their urban neighbors, chose not to and instead blamed the inner city residents for their troubles (Sugrue 2005).¹¹ In

¹¹ In a sense, lacking a coherent regional governance structure allowed the more successful areas of the region to isolate themselves, at least informally, from the problems of the inner

the end, even though redistributive strategies were not often the main focus of economic development efforts, many interviewees noted the importance of such improvements as peripheral or secondary concerns. So, even though the 'Sharing the Wealth' approach was not at the top of the list in terms of popularity, it still remained an important thread throughout Detroit's recent history, which suggests that some Detroit leaders did see the value in linkage policies to improve the local community even if their particular economic development strategy did not explicitly focus on it.

Overall, the leaders interviewed for this study provided a variety of perspectives on their own professional experiences during the 1980s. Their descriptions suggest that although a myriad of approaches were employed, one approach, 'Betting on the Basics', was the predominant strategy. As such, the prevailing ideology during this time period focused on existing heavy industry and continued the status quo (i.e., conservation) despite early warnings of widespread industrial restructuring. Largely ignoring calls to diversify their industrial structure or support more innovative strategies, many leaders in the Detroit region continued to focus their efforts on automobile manufacturing, putting into place a course of action that continues to challenge the region today. Whether or not this particular path has contributed to or detracted from regional resilience in Detroit is an important question that will be explored in further detail below.

city. Doing so allowed suburban communities to experience higher average incomes and quality of life, while ignoring the plight of their urban counterparts. Ignoring the inner city may come back to haunt the region as a whole, as indicated by the problems the region experienced with higher levels of unemployment during the most recent economic downturn.

Gauging Adaptive Resilience (or the Perils of ‘Betting on the Basics’)

Overall, the public perception of Detroit is generally not a favorable one; even today, newspaper headlines continue to announce further job and population losses and an unemployment rate of 14.9%, the highest unemployment rate amongst the country’s largest metropolitan areas and far higher than the national average of 9.7%.¹² Both a brief accounting of the economic history and accounts from local leaders corroborate the substantial challenges that the Detroit region has faced in recent decades.

To say that Detroit, on the whole, has adapted well to the challenge of deindustrialization does not make sense. As we saw in Chapter 4, the region has not improved on most traditional measures of social or economic vitality and employment losses continue to plague the region. If we then juxtapose the disappointing employment figures with the economic development strategies that were meant to improve these figures over time, we see that the economic development strategies have not successfully attracted or retained firms or increased employment in the longer term. The adaptive resilience perspective tells us that, in this sense, the Detroit region has not successfully adjusted to the challenges of deindustrialization because it has long hovered in the conservation and release quadrants and has not adapted well to changes in its economy over time.

¹² On February 2, 2010, the Bureau of Labor Statistics reported that, “Of the 49 metropolitan areas with a Census 2000 population of 1 million or more, Detroit-Warren-Livonia, Mich., reported the highest unemployment rate in December, 14.9 percent.”
<http://www.bls.gov/news.release/metro.nr0.htm>

However, despite such shortcomings in traditional measures of the economy, Detroit remains one of America's largest regions and portions of it, mainly suburban areas, have fared quite well as measured through indicators like per capita income and educational attainment. For better or worse, the region also remains the American headquarters of automobile manufacturing in both a symbolic and literal sense. The fact that it remains such a central player in the United States' economy and urban landscape suggests that, to some degree, parts of the region have exhibited adaptive resilience, albeit of the somewhat less traditional variety.

Outside of the industrial retention strategies that have kept automobile manufacturing headquarters in the Detroit region, the majority of these less tangible outcomes were not likely related to economic development strategies in the more traditional, firm-oriented approach sense. If we consider a more liberal definition of economic development – one that includes both place-based and people-based approaches – the relationship between these strategies and adaptive resilience becomes slightly more plausible. A more place-based approach to economic development might include targeted investment to counteract long-term disinvestment in at-risk areas, while a people-based approach might include job development or skills training for disadvantaged or at-risk populations. In Detroit, interviewees recalled that the overall economic development strategies were collective in nature, often including a combination of firm-, place- and people-based efforts. It seems fitting then that we would find evidence of adaptive resilience in measures beyond the number of jobs created (or lost) or the unemployment rate.

For example, evidence of adaptive resilience might be the fact that the region, despite such overwhelming challenges, is home to three professional sports teams, a redeveloping downtown, as well as 10 universities and 13 colleges with more than 140,000 students. New downtown stadia were constructed for the Detroit Tigers in 2000 and the Detroit Lions in 2002. Detroit also hosted the 2005 MLB All-Star Game, 2006 Super Bowl and the 2009 NCAA Men's Basketball Tournament. All of these events have prompted improvements in the surrounding areas, including areas along the city's riverfront. Recent work on the riverfront includes improvements to the Detroit River Walk and the construction of upscale condos along the Detroit Riverfront. These efforts stem from a longstanding desire, jump-started by the efforts of leaders in the 1970s and 1980s, to reinvent the downtown area as a desirable place to both live and recreate. Though these types of regional outcomes are not as easy to quantify, they suggest the possibility that the Detroit metropolitan area may have exhibited at least some elements of adaptive resilience in the long run.

In the sections that follow, I will discuss three other less tangible indicators of adaptive resilience as described by interviewees. This adaptive resilience results more from people- and place-based strategies than it does from firm-based economic development strategies. Though they are more difficult to measure than traditional economic development indicators, such as jobs created or saved, they are no less important to the region and its survival. Together, they offer us alternative lessons in regional resilience and give us insight into how regions adapt and bolster themselves in the face of a significant challenge.

Strong Activist Subculture

Given the common perception that Detroit is one of the most unionized metropolitan areas in the United States, it seems fitting that a certain amount of civic engagement and localized activism would also be found within the region. During the 1940 and 1950s, while manufacturing employment density increased in Detroit, unions gained a prominent role in the daily lives of workers. In 1985, union coverage in Detroit was 26.7 percent, almost 6 points higher than the national average of 21.0 percent (McCall 2001:66). Estimates from the 2005 Current Population Survey show that 16.5 percent of private-sector workers and 58.2 percent of public-sector workers are union members. Best known of the unions is the United Auto Workers (UAW), which is headquartered in Detroit and was extremely influential in obtaining better working conditions and higher wages for its members. The UAW, other local unions, and a growing number of activist groups has given Detroit the reputation of being a union town with an activist bent (Lorence 1996).

Activist groups were present throughout Detroit's long history but they began to focus intensively on local economic issues only in the wake of deindustrialization. One activist group who collectively emerged in response to problems they saw with local economic development was the Detroit Alliance for Rational Economy (DARE). The group formed in 1977 largely in response to questionable development practices happening in Detroit at that time. As one interviewee and former DARE member noted,

“The DARE group formed in response to a common desire to question the massive sums of money and tax abatements that developers were receiving in downtown Detroit. As part of our efforts, we elected Ken Cockrel to City Council in 1977 and he worked hard to oppose the tax abatements that we all were fighting against.”

In this case, the tax abatements in question pertained to the money being invested by the Detroit Economic Growth Corporation (EGC). In materials produced by Ken Cockrel for DARE members, the EGC is described as:

“...a private corporation; its meetings are not open to the public. Nevertheless, its annual budget comes primarily from public sources: \$375,000 from the State of Michigan, and \$375,000 from the City of Detroit, which is extracted from the Community Development Grant Funds” (Wood Henrickson 1991, 529).

DARE members contested the power of the EGC on the grounds that its actions were directed primarily by Detroit’s corporate elite. Its Board of Directors was appointed by the Mayor and included the chief executive officers of the major local corporations. Cockrel contended that there was only token representation from both the trade unions and the community (Wood Henrickson 1991). On behalf of the DARE group, Cockrel argued that the public was losing out because,

“Critical decisions are made by a few people who are insulated from public control....Their priorities are clearly established by the business representatives. These organizations are not places where community input can be made, but are organizations whose primary function is to “facilitate” the investment of private capital in downtown Detroit (Wood Henrickson 1991, 530).”

Such investments were so troubling to members of DARE that members organized to elect public leaders who would question subsidized private investment without public consent. One former DARE member noted that,

“DARE was a pretty interesting organization because we were integrated and locally based. Our idea was to get Cockrel elected to

City Council and once that happened, we would get more people like us elected to City Council and Cockrel would become mayor.”¹³

This interviewee noted that DARE’s primary approach was two-fold: first, they would utilize the power of activism to elect reform-oriented leaders to local government and second, they would use local knowledge to devise alternative strategies to this type of economic development. Though DARE’s efforts supporting the first part of their agenda were interrupted by the premature death of Ken Cockrel in 1985, the former DARE member notes that,

“DARE still remains one of the most interesting and long-term groups of people who have consistently been involved in economic development issues in an urban area. Even today, the wife of Ken Cockrel is on the City Council. The new mayor is Ken’s son. The spirit of DARE and Ken lives on.”

In regards to the second part of DARE’s agenda—the development of alternative economic development strategies—similarly important outcomes have also materialized. One of the most important writings on alternative economic development, *Rational Reindustrialization: An Economic Development Agenda for Detroit*, was written by Dan Luria and Jack Russell (1981) and stemmed from their own involvement in DARE. Luria and Russell’s plan encouraged the rebuilding of Detroit through retooling of abandoned plants and the retraining of displaced high-skilled auto workers in the emerging energy industry. Though much of their plan was never implemented, the tenets of a rational reindustrialization remain an important reminder of alternative scenarios for economic development in the wake of economic downturns.

¹³ Ken Cockrel, Jr. was replaced by Mayor Dave Bing on May 11, 2009.

Again, the strength of a region's activist culture is a measure that is not very easily quantified. Nevertheless, it could be argued that having an established network of activists allowed the Detroit region to maintain a system of checks and balances against the powerful decision-making institutions and corporations. Or, alternatively, it could be argued that the strong activist subculture within the center city pushed this development into the welcoming arms of their suburban counterparts. Either way, such checks guarantee, at least informally, that the public will continue to have an semi-organized outlet through which they can voice their opinions about the trajectory of the region and the way that its economic development funds are spent. Though it may not be as formal an arrangement as the "broadly participatory processes" that Stiglitz (2002) describes or the regional equity approach that Pastor, et al. (2009) write about, the Detroit activists' struggle reminds us that such public engagement should be celebrated and should not be taken for granted in communities experiencing such profound challenges. Even if the degree to which public engagement contributes to regional resilience has not yet been determined, we can certainly assume that a region without public engagement does not a resilient region make.

Growing Importance of Quality of Life, Societal Needs

One other important way in which the Detroit region adapted to the realities of this economic downturn was the understanding that *improving the quality of life* within the core of the Detroit metropolitan area was of great importance. In the 1970s and 1980s, public officials across the nation began to understand that corporations were paying increased attention to the quality of a region's services and general amenities as well as the public image of the region

(McCarthy 2002). Recognizing the link between employee retention and a region's quality of life and public image, corporations began looking for locations that were attractive to the people that they hoped to employ. Detroit in the 1980s, which was generally perceived as being an increasingly dangerous and unattractive place to recreate or live, was not often considered a desirable place for corporations to locate. One long-time real estate developer had this to say about the challenges that Detroit faced:

"In the early 80s, the downtown area was a scary place for many people. There was really no reason to be there. So, when 5:00 rolled around, people left and went back to their homes either in the suburbs or in other parts of town. No one really saw it as a place they wanted to be."

Such negative sentiments were not reserved for the inner city only; the metropolitan area as a whole faced similar challenges. One Macomb County official noted that,

"We faced our fair share of negativity from outsiders even though our schools are better than most in the nation, we have great parks and our communities are, and have always been, highly desirable places to live."

Given the pervasiveness of this negative perception, interviewees frequently alluded to the difficulty in trying to devise a strategy to increase the quality of life for the people of Detroit and the corporations headquartered there. One city planner described the process as follows:

"We knew we had to do something. People and companies were leaving Detroit in droves. We thought that the downtown needed shopping, sporting events and high-end office space but we didn't always agree on how it would get done. So, we did our best to do it. It took a long time but I think we got there."

Many of the efforts employed by stakeholders in Detroit took a long time to execute, including the redevelopment of downtown Detroit through the

construction of elements like the Renaissance Center, a group of seven mixed-use, interconnected skyscrapers on the Detroit River. Later investments also have included stadia, three casinos, and a revived Greektown. Though development does not always mean increased resilience, interviewees generally agreed that much of what was accomplished during this time period did put Detroit in a better position than it would have been without this initial development and investment. One Detroit City Councilperson's staff member noted that,

"I was proud of the development that we were able to push through. We didn't get everything we wanted - far from it - but we did start things in motion and made people begin to see Detroit for what it was. The casinos and new stadia came later but they wouldn't have even been possible if we hadn't started pushing for downtown way back then."

Though not always quantifiable, efforts to improve the downtown were likely instrumental in creating the perception of hope and the possibility that life was improving for Detroit and its residents. One long-time business owner in the central business district noted that,

"Our mood was pretty low back then. We kept hearing that things would get better, that people wouldn't keep losing their jobs.... But in the end, we didn't always believe what the newspapers and city hall were saying; we had to see change in order to believe that it could happen."

The sense that small improvements were happening, like the Renaissance Center and the revival of Greektown, and that larger developments were likely to happen in the future gave hope to many residents and leaders alike. Though hope is not easily measured and promises of a better future cannot be quantified, the sense that incremental improvement is possible cannot be underestimated in regions suffering from such prolonged downturns (Reese

2006). Physical improvements to the downtown, both completed and planned, communicated a commitment by leaders to the improvement of the quality of life within the core of the Detroit metropolitan area. In so doing, leaders helped the region adapt in the wake of this economic downturn by better positioning the Detroit region as an attractive place to live, work and recreate.

Workforce Development Efforts

As Pastor, et al (2009) suggest, additional evidence of adaptive resilience can be found in the emphasis that regional leaders placed on *workforce development efforts* in the wake of an economic challenge. As semi-skilled automobile workers continued to be displaced throughout the 1980s, efforts to move Detroit's workers into other positions - either within the automobile sector or another industry – intensified. In many cases, workers required significant education or re-training in order to find gainful employment. Mostly gone were the days when an unskilled laborer could easily find employment in one of the Big Three plants. One interviewee, now a professor at Macomb Community College, described his own earlier experience in an automobile manufacturing plant as follows:

“The auto industry basically, until the 1980s, hired people off the street. You had a short orientation film, went to a medical examiner and then they asked you how much money you wanted to give to United Way and then you were hired. I experienced that myself. I was hired in 1969 in a Chrysler plant exactly like that; I went in at 10 in the morning and by 4:00 in the afternoon, I was working the afternoon shift.”

The now-professor then described how changes in the automobile production process and threats from foreign companies quickly changed the hiring and

training practices of the Big Three corporations. He notes that it was in the early 1980s,

“...when workforce development and HR issues and all sorts of questions related to education begin to emerge because, lo and behold, the automakers find out that the Japanese do intensive amounts of training inside the plants and that they take seriously the workforce issues and preparation issues.”

Responding to the realization that foreign competitors were simply training their employees better, early efforts to cultivate worker training programs began to coalesce within Detroit and within the State of Michigan around this time. Such efforts were aided by the support of a wide variety of stakeholders in the automobile industry. One retired automobile union representative mentioned that the threat of these increasingly-powerful foreign competitors was part of the motivation for union support of worker training efforts.

“We, the autoworkers, and they, the Big Three, began to realize that we had to do some hourly worker training. Then that was the origin—in 1984—when the UAW contracts established the Joint Training Fund, which we saw as a commitment to the future of automobile industry.”

Efforts to train Detroit-area workers for gainful employment extended beyond the automobile sector. In the mid-1980s, the State of Michigan began to realize that threats to the economy were, in many ways, a public training issue and began to provide money for customized training of both automobile workers and workers in emerging sectors like healthcare and biotechnology. Such efforts often relied on Michigan’s community colleges and other local organizations for training programs.

One of the earliest local organizations to get involved in worker training was a non-profit called Focus:HOPE. In 1981, Focus:HOPE started its Machinist

Training Institute in order to train workers for the types of jobs that employers were looking to fill. As one employee of Focus:HOPE describes,

“The goal has always been to improve the community through worker training. Our organization has played a unique role in that sense; we train people for specific jobs in the community.”

Since its inception, Focus:HOPE has continued to grow by partnering with private companies and local colleges to offer degree programs. These types of programs are designed to prepare local workers for high-skilled, and often high-wage, positions in the community. One interviewee, a Detroit-area business owner who has been involved with Focus:HOPE for several decades, described the unique role of the organization.

“Focus:HOPE is an important part of the Detroit community. It serves an important function – worker training – and has been very successful in its efforts to do that. Over 10,000 people have sought training through Focus:HOPE and many have found jobs that would not have otherwise been possible..”

Indeed, Focus:HOPE has been an important player in local workforce training; its website boasts of having graduated nearly 200 engineers, 2,500 machinists and 900 information-technology specialists. Though such numbers may seem like a drop in the bucket, a stronger educational environment was just one of the many ways in which local officials tried to market the Detroit region as a place where both human and social capital were highly valued.

Overall, the Detroit metropolitan region might not look like an archetype of adaptive resilience. In fact, on many measures it has been decidedly rigid and inflexible, and certain ongoing challenges remind us that the region continues to face a difficult future. Nevertheless, certain aspects of the region – some of

which were likely formed in response to these difficulties – have helped to improve the lives of Detroit residents and better position the region for future opportunities.

Significance of Findings

Though most interviewees were hesitant to use the word resilient to describe the Detroit region as a whole, most were quick to point out that portions or elements of the region may indicate the presence of adaptive resilience. Numerous interviewees described successful adaptation efforts, like redeveloping downtown and improving the quality of life for Detroit residents by upgrading the amenities and services offered to them. Many pointed to the recent hosting of national events and the investment in downtown stadia and casinos as evidence of this resurgent path. Other interviewees pointed to the strong and long-standing tradition of activism and civic engagement as evidence of adaptive resilience. The strength of these groups, historically and today, is measured by their ability to engage in the decision-making process and affect positive change for the people who call Detroit home. Still other interviewees pointed to the region's enduring history of workforce development efforts as evidence of successful adaptation. Union-supported training efforts, along with public sector and non-profit support and leadership, have sometimes made it easier for Detroit workers to find gainful employment either in the automotive industry or other fields. Though unemployment remains incredibly high in the Detroit region, a long tradition of training workers indicates a certain type of regional resilience: an investment in human capital.

It would be imprudent to ignore, however, the obvious and substantial challenges that the Detroit metropolitan area continues to face. Since the 1970s, residents have watched both jobs and people disappear as local automobile manufacturers reacted to mounting pressures at home and abroad. The economic downturn had lasting effects on the Detroit region and affected different parts of the region in different ways. The urban core suffered devastating job losses, while the periphery saw substantial growth in both population and jobs. Whites gradually left the city to follow jobs and more favorable amenities to the suburbs, while many African-Americans remained within the urban core. Just as the region became increasingly segregated, it also became progressively more fragmented as municipalities clamored to attract new development and new in-migrants. Attracting either of these things was generally difficult for all parts of the region, not just the urban core, because the region as a whole came to be seen in a relatively negative light.

Despite such adversity, Detroit leaders remained optimistic about their ability to intervene and to improve on the local economy in a variety of ways. Interviewees described an array of responses at the state, regional and local levels. The data collected from these interviews indicate a strong propensity for leaders to subscribe to the 'Betting on the Basics' approach. Though the 'Betting on the Basics', conservation-based approach seemed to work for a while – Detroit's productivity rebounded slightly during the 1990s – this automobile manufacturing-centric approach only temporarily masked fundamental weaknesses in the regional economy, many of which have reared their ugly heads again in recent years. We now know that this approach was not particularly successful in the long run because it kept Detroit within the

conservation phase for far too long. Nevertheless, the information provided by these Detroit leaders help to tell the story of how regional leaders responded in the wake of a slow-moving crisis. The information gleaned from these interviews also provides us with a more nuanced picture of the decision-making process in 1970s and 1980s Detroit.

CHAPTER 6

Other 'Basic Betters' - Milwaukee, Buffalo, and Cleveland

As was noted in Chapter 3, this research has been divided into two main components: a single case study of the Detroit region (Chapter 5) and a multi-N study that includes Detroit and seven additional Rust Belt regions (Chapters 6 and 7). In this chapter, the focus is on three other regions that, like Detroit, chose to 'Bet on the Basics.' Findings from this research suggest that, to varying degrees, Milwaukee, Buffalo, and Cleveland all crafted strategies that focused primarily on the retention of manufacturing firms. An analysis of the processes by which each of these three regions arrived at their own responses, as well as a discussion of related outcomes, follows below. A comparable analysis for the remaining four regions, all of which opted to pursue other types of economic development responses, follows in Chapter 7.

Similar to the research conducted for the Detroit case study, much of the qualitative data collected for this larger study come from interviews with regional leaders from the 1970s and 1980s. Interviewees represent a cross-section of interests, jurisdictions, and sectors in each of the case study regions. A minimum of three interviews were conducted in each region, and generally targeted at least one stakeholder from the public, private and civic sectors. In most cases, additional archival research was also used to verify interviewees' answers. A variety of perspectives allows for a more nuanced understanding of each region's situation during this particular moment in time. In this chapter, I identify commonalities across these case study regions, and

offer a series of lessons that we can draw from both the data collected as well as subsequent analysis. First, I begin this chapter by briefly introducing the regions, their economies and the processes by which they crafted their response. Regions are presented in order from most dependent on manufacturing to least dependent as measured by manufacturing as a percent of total employment in 1970.

The Regions – Milwaukee, Buffalo, and Cleveland

As we saw in the case of Detroit, a common regional response to the challenges of deindustrialization was to struggle against change, ignore calls for diversification, and attempt to recreate the economic base of the past. Given that Detroit's economy was so intertwined and so dependent on one single industry that had done so well for so long, one can understand why regional leaders there may have considered themselves immune to deindustrialization. Why wouldn't leaders there want to 'Bet on the Basics' and remain in the conservation phase when doing so had done their region well for such a long time?

In other Rust Belt regions, however, the economies were not so specialized in one given sector of the economy. Few of these other regions were so synonymous with any one particular product or corporation, and therefore they were probably less inclined to commit to any predisposed trajectory. To some extent, these other regions had options. Though it wouldn't have been easy, regional leaders in Milwaukee, Buffalo and Cleveland could have chosen another response. Nevertheless, these three regions followed a similar approach to the one pursued in Detroit. So while Detroit certainly deserves its

own single case study, it is not a stand-alone phenomenon; the lessons learned in Detroit should also be kept in mind as we examine these three other regions that all chose to 'Bet on the Basics', despite appearing to have other options.

Milwaukee

Like all of the other regions that ultimately chose to 'Bet on the Basics,' the Milwaukee region was originally settled as a strategic transportation site due to its waterfront location. In addition to shipping, Milwaukee's early economic base included manufacturing, stockyards, and assorted heavy industry. Early on, the region was a distribution center for Midwestern agricultural produce, especially wheat grown in Wisconsin. Easy and plentiful access to Wisconsin's wheat, combined with large German and Polish populations, led to a large beer-brewing industry from the mid-1850s onward. Other industrial strengths included grain processing and storage, as well as tanneries.

Early strengths in brewing, processing, shipping and manufacturing changed gradually over time; the brewing industry faded significantly by the 1970s and the region's manufacturing base continued to grow. In addition to general manufacturing production, the region's early strengths in tool-making led to a local specialization in machine manufacturing and industrial controls. Early forays into these particular industries led to long-term specializations that would last for decades. A local economic development expert described how an early strength in tool-making led to other related sectoral strengths.

"Historically, we started with blacksmiths making tools and then the demand grew because agriculture grew to the west of here and they wanted more

machines. So we started making machines to make machines, and then we needed mechanical controls for those machines, and then we needed electronic controls...That's how we came to account for much of the world market in industrial controls."

However, as was the case in so many other regions, success in one area of the economy did not always translate into success across the board. Tool-making and then industrial controls has been one of the few easy successes seen in Milwaukee. The region experienced largely unfettered growth up until the 1970s. Thereafter, leaders watched as manufacturing jobs disappeared in droves. During the 1980s, the region suffered considerably as firms downsized or closed altogether. A former council member described these turbulent times.

"There certainly was concern. The recessions hurt and then the migrations outward certainly had an impact. People were aware of these. There were just a number of companies that closed their doors, many of them larger employers in the region. In the early 1980s, Babcock and Wilcox made pipes for nuclear reactors in West Allis. Then they closed and 1,200 jobs (were lost). The biggest single employer was Allis-Chalmers. They made turbines and tractors, farm equipment, a host of products and they were always second, third, or fourth in where they stood in any given market. Their heyday in West Allis, had 17,500 workers there. They shuttered in 1985. Even in brewing, Schlitz Brewing, the beer that made Milwaukee famous, disappeared in 1986 or 1987 and that was another 4,000 jobs."

In reaction to these significant and highly visible losses, leaders embarked on an aggressive agenda to retain manufacturing and bolster the economy against future challenges. During the 1970s and 1980s, the region fought to remain in the conservation phase by 'Betting on the Basics.' The reason why this approach was prioritized may be due in part to the fact that attraction strategies - the hallmark of approaches like 'Bidding Down', 'Bowing Out', and

'Sharing the Wealth' - were not really feasible in Wisconsin. A former suburban mayor described why this is the case:

"The difficulty is that Wisconsin doesn't play in the incentives game. It has very few tools. Part of the state constitution says everyone will be taxed the same. So, you can't forgive taxes coming in the way many states do. So, we have TIFs, a few other things (that) can be done – some training incentives and the like.... In Wisconsin, we stand no chance on the attraction... I cannot name a company, nor can anyone else, that has moved to southeastern Wisconsin in the last 25 or 30 years."

Having so few tools in hand to help attract companies, Milwaukee leaders instead chose to focus on the areas of the economy in which they perceived they had an advantage. Interviewees suggest that the strong commitment to manufacturing, or at least to high-tech varieties of manufacturing, stems from the fact that within the city of Milwaukee there was plentiful vacant industrial land and a highly-skilled workforce across the region as a whole. While the abundant land would come about later through policy changes, the presence of a skilled workforce was likely the result of both local culture and political intervention. As the former suburban mayor noted, the workforce was seen as a real asset during the struggles of the 1970s and 1980s.

"We have had a very skilled workforce. We certainly have a large unskilled workforce but the skilled workforce had a terrific work ethic. I've talked with lots of CEOs and Human Relations folks who mention the work ethic of Milwaukee workers....So this was a selling point. And the skill levels were high. We've got a lot of people who know how to make things."

Though these experienced workers could not do much to attract firms, they were a large part of the reason that firms either stayed or grew their businesses in the Milwaukee region. Maintaining this skilled workforce was

part of the strategy that local leaders employed in their ‘Betting on the Basics’ response. As one local educator noted,

“Wisconsin has a very strong technical college system. I think we’ve got 14 technical colleges spread around the state. The largest one is in Milwaukee; it’s called Milwaukee Technical College.”

Workforce development efforts have historically been a significant part of Milwaukee’s history (Fung and Zdrazil 2004). In the wake of economic restructuring in the 1970s and 1980s, these efforts were also an important component in the economic development response seen in Milwaukee. Nevertheless, leaders were not naïve enough to think that a skilled workforce would be the only thing needed to grow or retain firms. Numerous other efforts were also made to market the Milwaukee region as a good place for heavy industry to do business.

Rast (2009) argues that annexation was the first of many steps that the region took towards creating a more hospitable environment for businesses. An aggressive annexation program that was started in the 1940s and 1950s really took shape in 1960 with the election of Democrat Henry Maier as mayor of Milwaukee. Maier’s main economic development initiative was to use the annexed land for industrial land banking as a way to ensure that there would always be a large supply of vacant industrial land ready for firms looking to expand specifically within the city (Ibid). Because a penchant for sprawling, single-story plants materialized during the 1970s and 1980s, the land banking approach to industrial development ended up being a pretty good bet for the city of Milwaukee, and thus for the region as a whole.

However, given that land banking was a relatively new phenomenon at this point in time and given that the upfront expenses of this approach were so high, one can appreciate just how risky this type of initiative may have felt back in the 1960s and 1970s. Nevertheless, interviewees frequently mentioned this approach as being one of the most important economic development tools used in the Milwaukee region. As one current city official noted,

“It took a long time to be successful. The basic notion I think has some merit because it did allow the city to be competitive. It had parcels. It developed them in ways, put in the infrastructure. So when manufacturers make that last minute decision that they have to expand, (they) could buy and build in a short period of time. But since there was so little activity in the 1980s, we were getting smaller rather than larger, this land sat for a period of time, quite a while. In the 1990s, business picked up and we had some demand. It grew. The first part of the 1990s is probably some of the best growth we saw in a while.”

In time, land banking for the purposes of industrial and economic development occurred in both the city and in the suburbs. In both cases, it generally occurred on land that had been purchased, cleared and subsequently ‘banked’ by the public sector. As one public sector leader noted, this type of investment felt like a pretty risky move at the time.

“Had we known what we were getting ourselves into - because there were environmental issues and the potential that we might not be able to sell the property to recoup the cost of the investment - would we still do it today? At the time, we saw little other options. We knew that the private sector was not going to invest their money into these properties. If there were going to be any expansions, if firms were going to expand, they were going out west, up north into the greenfield areas, rather than into our brownfields...So, we thought that in order to be able to retain businesses, we had to do a number of things like banking the land, and spending money on roads, water and sewer.”

Though the land banking industrial development approach does not fit cleanly within the parameters of the 'Betting on the Basics' approach that Markusen and Carlson (1988) describe, it undoubtedly reflects a desire on the part of Milwaukee leaders to bolster employment in the troubled urban core and make at least this part of the region a more attractive place for large manufacturers to do business. Because of the risk involved - both financial and political – the Milwaukee region represents one of the few cases where the leadership adapted by taking a real chance and '*Betting* on the Basics.'

Buffalo

In Buffalo, 'Betting on the Basics' felt a little less like a choice and more like an inevitable fate. Early sectoral strengths in grain storage, steel production, railroad and shipping commerce, automobile production and aerospace design and construction brought the Buffalo region great prosperity in the early 1900s. But all that changed during the latter half of the 20th century, as the region began to confront a series of formidable challenges.

Among the more devastating changes was the opening of the St. Lawrence Seaway in 1959, which made water-based travel through Buffalo considerably less relevant. While Buffalo grappled with these changes in transportation routes, it also confronted its own problems related to the national fundamental economic restructuring trend. The region, which had long been dependent on heavy manufacturers and related industries, had to deal with a maturing steel industry on top of this broader economic slowdown. In the 1970s, Buffalo steel manufacturers were increasingly strained by foreign competition, aging technology, and excess capacity. Such challenges contributed to a massive,

and painful, restructuring across the Buffalo region's economy. One former Erie County official said of his outlook at that time,

"Everybody needs steel....and for a company to start saying we are not going to make as much steel as we used to, we are going to cut down not only Buffalo, but other plants....it was pretty traumatic. Not only were the numbers bad in terms of layoffs and the ancillary ripple effects, it was especially traumatic because (we felt) something was happening and it was a hard thing to take."

The severity of this restructuring became abundantly clear in 1977 when Bethlehem Steel, a major employer in the Buffalo region, took a \$740 million dollar write-off and shut down most of its local operations. It scaled back even further with a reduction of approximately 3,500 more employees in 1978. Within three years, Bethlehem Steel closed its foundry and twelve-inch bar mill operations and Republic Steel also cut about 2,500 jobs. Overall, the 1970s and 1980s were a time of substantial job losses in steel and manufacturing in general. Most of the significant losses occurred between 1979 and 1986, when 45,000 manufacturing jobs - one-third of the manufacturing jobs in the region - disappeared. Unsurprisingly, unemployment for the region as a whole (9.6) ran significantly higher than the national average (7.6) during this time period (Dillaway 2006).

Compounding the troubles of significant regional job losses in the manufacturing sector and high unemployment overall were the related problems of population outmigration, a decaying downtown, inadequate infrastructure, pronounced white flight to the suburbs, emerging racial tensions, and highly segregated schools (Ibid). From 1970 to 1980, Buffalo lost almost 95,000 people or 5 percent of the total population (US Census of Population and Housing 1970, 1980). Job losses similarly made local leaders

increasingly concerned about the future of steel in Buffalo and the viability of the Buffalo regional economy as a whole. As Kraushaar and Perry (1990) put it, "...the Buffalo economy was a perfect example of a region dedicated to and dependent on a mature industrial base" (50). Despite such dependence, Buffalo leaders from the private and public sectors did attempt to address these problems in a variety of ways.

Buffalo is an interesting case because, unlike many of the other regions in this study, its early leadership came largely from the public sector. As Dillaway notes, power often resided with the political leadership "because elite organizations did not provide proactive leadership in Buffalo's political and economic debates" (2006, 133). Though all of that would change in the late 1980s, much of the early response to deindustrialization was indeed crafted by local politicians. Among the most influential strategies employed was the commissioning of a study - "Buffalo Area Economic Readjustment Strategy" - by Arthur D. Little Consultants in 1978. The report card-like study was commissioned by the Erie County Industrial Development Authority (ECIDA) and supported by Mayor Griffin, who wanted to provide leaders with a framework for moving forward. A former economic development official had this to say about the study's findings:

"It found over-concentration in steel and found some real problems in terms of labor-management relations. We were a union town, lots of negative implications...and a lot of strike problems that were giving the area a bad reputation. We had a very fragmented economic development scene with multiple agencies sometimes working at cross-purposes or too many people trying to do the same thing without any coordination. So the report card was pretty stark in terms of (Buffalo) being on a bad road and not terribly well-equipped to deal with it... A plan for attempting to deal with it came out of (this report), which really became the blueprint for economic development over the next 15 years or so."

One of main the findings from the study was the recommendation that local leaders essentially write off the ailing steel industry and focus instead on retaining other, primarily industrial firms that were still active in the regional economy. The end goal of the study was to make the region self-sufficient by guiding it through long-term changes in its basic economic structure. The study provided recommendations for how the ECIDA could reach out and assist the firms that were experiencing difficulties as well as firms who were considering expansion. Because only Erie County, and not Niagara County, was part of ECIDA's jurisdiction, responses crafted in regards to the Arthur D. Little study primarily pertained to Erie County and the city of Buffalo. A former head of the ECIDA described this assistance process.

"We had a staff of four and their job was to knock on doors...The goal was to call on every single company every two years and explain to them what we could offer to try to get things going. When you called on a company, you uncovered one of two things. One is that you uncover retention problems with companies at risk, either ready to take flight or disinvest. At least you can get them on your watch list and start dealing with them. The second thing is that you find the ones that, given the right incentives or given the right means of correcting some of the diseconomies they were facing in the Buffalo area, might actually put a shovel in the ground and expand."

This focus on retention strategies was one of the many ways in which the Arthur D. Little study influenced local decisions during the late 1970s and early 1980s. In a sense, the authors of the study recommended that the region try to adapt by 'turning the corner' from the rigidity of the conservation phase into the creative destruction of release. However, making this transition was not an easy task for regional leaders, as evidenced by their inability to 'turn the corner.'

Another important development that stemmed from the study's recommendations was the creation of the Buffalo-Erie County Labor Management Council. Again, this effort was primarily focused on Buffalo and Erie County, not Niagara Falls or Niagara County. The group was formed largely in response to the tremendous ongoing problems between labor and management in the Buffalo region. As a former member of the council describes,

"The council was created to attempt to deal with the union situation, the large number of strikes, the labor-management animosity that was present in town, the reputation that the Buffalo area had for being a heavy union town. If you were going to come and do business there you better be prepared to take a strike every once in a while and deal with it. The council's charge was to get in the middle of sensitive labor-management issues as neither management nor labor, but as an independent entity affiliated loosely with the ECIDA; someone who could just be an independent broker and arbiter. It was also an attempt to get more settlements without strikes and to attempt to change the reputation of the area."

Despite such lofty goals, the group was marginally successful at mediating a number of strikes and settling several major grievances (Dillaway 2006, 117). Interviewees, however, frequently made note of the lingering challenges associated with a heavily-unionized economy.

Beyond the ECIDA, numerous other public sector players also weighed in with their own economic development responses. One of the most visible responses came from City Hall, when Mayor Griffin formed the Buffalo-Erie County Regional Development Corporation in 1978. This group, largely consisting of community development professionals, was designed to be a lending corporation that would give the public sector the ability to support innovative business initiatives in Buffalo. More importantly, the formation of this corporation was an important step towards creating a public-private

partnership and bringing business leaders into the fold. One interviewee, a former state economic development official described the need for private sector involvement.

“We pulled together the steel companies...we did a lot of that stuff. But really we couldn’t get a lot going. It was an investment issue. The public sector was really willing to do a lot but we needed the private sector.”

Ongoing efforts amongst the business community ended up being an important part of the Buffalo story, especially in light of a significant shift that occurred amongst the regional leadership in the late 1970s. The shift occurred in part because of an infusion of new leaders who came from outside of the region and were highly entrepreneurial (Perry 1990). Amongst the newcomers were Ross Kensie, brought in to head Goldome Bank; Stanford Lipsey, publisher of the *Buffalo Evening News*; and Robert Wilmers, head of M and T Bank. These three joined with other members of the business elite to form the Buffalo 18, a powerful group of executives who worked together to assume control of the Greater Buffalo Development Foundation, a smallish group of business leaders; the Chamber of Commerce; and various other local groups. Members included heads of all the major regional banks, manufacturers, and service sector firms. In total, the Buffalo 18 included 17 CEOs and the president of the region’s largest university (ibid). A former Director of the Western New York Economic Development Corporation (WNYEDC) said that,

“With the Gang of 18, you knew you were dealing with a powerful group. When they made up their mind on something, it usually happened. You could only be in this group if you could be counted on to make things happen.”

Ultimately, the group did make things happen, primarily by infiltrating the boards of various local organizations and funding the recruitment of key

personnel from outside the region. Such maneuvers were useful in the sense that they helped formulate the critical mass needed to devise a plan to move the region forward. Implementation of this plan, however, was not entirely successful.

Collaborating with this group were certain state government officials and select elected officials. The WNYEDC was an important part of the recovery strategy, providing project assistance, industrial modernization and targeting clusters that had the potential of being globally competitive (Kossy 1996). At this point in time, cluster analysis focused primarily on a burgeoning medical corridor and leveraging some local assets for tourism development. For the most part, WNYEDC provided long-term strategic planning for the regional economy as a whole and helped guide the development process for certain larger projects. These types of larger projects, including waterfront development and a mass transit line, were generally considered embarrassing failures and did little to help the region's recovery process. Even with support from the nation's first Urban Development Action Grant and millions of dollars in Community Development Block Grants, the results did little to change or disrupt the region's trajectory.

In the end, most of these valiant efforts did little to help Buffalo, and to some extent the region as a whole, gain traction. Alternative approaches seemed implausible as efforts to attract outside firms proved unsuccessful. Retention strategies were slightly more effective but generally not productive enough to stave off decline. Ultimately, the challenges facing Buffalo were larger than anyone had previously thought. A former city official in the Department of ED summarized it best when he said:

“The manufacturing and durable industries were restructuring and the plants in Buffalo were old and inefficient. The workforce was inefficient. Buffalo was going through a long period of structural economic decline. It was cold. It wasn’t an attractive location. That was kind of the longer term challenge.”

Indeed, these longer term challenges continue today. Buffalo remains a region that has struggled greatly to adapt to the challenges of the late 20th and early 21st centuries. Its retention-based strategy – ‘Betting on the Basics’ – was not enough to counter the region’s massive industrial restructuring, move the region beyond the conservation and release phases, or improve the negative image of Buffalo as a whole.

Cleveland

Cleveland’s early rise to prominence as a center of industry revolved around its strategic location at the nexus of the Cuyahoga River and Lake Erie. Beyond transportation, early strengths were all things steel with a focus on primary metals, fabricated metals, non-electrical machinery, electrical machinery, and transportation equipment. Like so many other manufacturing-intensive regions, the Cleveland economy underwent significant restructuring in the latter half of the 20th century. Cleveland began confronting significant challenges in the 1950s, many of which would continue through the 1980s and beyond. Between 1967 and 1977, one in seven manufacturing jobs was lost (Rand 1982, 7). Continuing challenges resulted in a loss of nearly 18,000 manufacturing jobs between 1976 and 1984 alone (Krumholz and Forrester 1990, 16). The biggest losses were seen in primary metals, electrical and nonelectrical machinery, and transportation equipment (Rand 1982). Increases in non-manufacturing employment helped to counter these losses but many of these new jobs were in lower paying positions. Overall, non-manufacturing

employment growth contributed to a slight increase in total employment but growth occurred at a much slower rate than the national average.

The Cleveland region also confronted major demographic changes during this time period. Up until the 1970s, population had continually grown at a moderate pace. Intra-region population shifts accounted for some population losses in the inner core but growth in the suburbs generally was enough to offset any losses seen in the inner city. Total population losses began during the 1970s when the Cleveland metropolitan area lost about 150,000 people, or 6.5% of its total population. Outmigration continued through the 1980s, when another 68,000 people left the region. Population for the region would stabilize in the 1990s but has not recovered to its peak level of 1970.

Early warnings of economic restructuring combined with ongoing population outmigration in the 1970s and 1980s caused growing concern for Cleveland's leaders. In 1982, regional leaders were so concerned with these emerging problems that The Cleveland Foundation commissioned an assessment of economic and population trends by The Rand Corporation. Entitled, "The Cleveland Metropolitan Economy: An Initial Assessment", the report's purpose was to gain "a better understanding of how the metropolitan Cleveland economy works, what its special role has been in the U.S. economy, and how it has been responding to a changing economic environment" (Rand 1982, iii). In the Executive Summary of this assessment, the authors optimistically describe a changing Cleveland economy.

"Cleveland's slow rate of total employment growth does not necessarily suggest a stagnant regional economy. The more detailed figures indicate only

that the Cleveland metropolitan economy is a mature but still quite dynamic economic system” (9).

The authors specifically point to the slowing of steel manufacturing as evidence of a maturing economy for the region as a whole, adding that many of the more recent challenges also stem from the region’s close ties to the automobile industry. Much of the early economic growth in Cleveland was linked to the automobile industry because the region’s steel mills sold most of their output to automobile production firms. Still, the Rand report showed that Cleveland was less sensitive to fluctuations in the automobile industry than other metropolitan regions like Pittsburgh and Indianapolis (Rand 1982). Though the authors admit that Cleveland’s economy in the 1970s was not all that diverse, “Cleveland production serving other markets cushioned the shocks of swings in demand from the automobile sector” (Ibid, 14).

To the extent that this diversity may have lessened the blows of cyclical fluctuations in the economy, such cushioning may have also masked the emerging challenges that Cleveland would soon confront as a result of widespread economic restructuring. Unlike other regions where manufacturing losses were sudden and sharp, Cleveland’s early losses were less severe. As such, leaders had less incentive to consider alternative development scenarios. One economic development official with the City of Cleveland recalled an over-arching commitment to a ‘Betting on the Basics’- type economic development response.

“I think at that time we were still hoping to hold onto the heavy industrial pattern of the past: steel, metal bending (particularly in automobiles), tool and die work, chemicals, paints, varnishes ... Those were the older industries that

had been very productive in the past and the city was still trying to hold its place with those industries.”

Interviewees frequently described how early response efforts did in fact align with a ‘Betting on the Basics’ approach, focusing largely on retaining manufacturing firms in the region. However, as one former council member described, losses seen in the steel industry indicated that this approach was not working.

“By the late 1970s, it was apparent that we were losing industries. I think in the early 1970s we had four steel manufacturing facilities: US Steel, Jones and Laughlin, New Republic’s world headquarters, and one other. Early in the 1970s, two of them closed down or merged, so we began to lose jobs in steel. We were very conscious of the local loss of population and we were increasingly very conscious of the fact that the existing population was very poor. We weren’t helping anyone by trying to hold onto these dying facilities.”

And so it was around this time that support grew for a more progressive approach to economic development. Calls for an equity-driven approach came largely from the City of Cleveland Planning Commission. The Commission during this time period advocated “not for the business community but for ‘those people in Cleveland who had few if any choices,’ for poor and working-class city residents” (Krumholz and Forester 1990, xix). Because their work was so focused on advocating for the disenfranchised, the Commission’s efforts were largely focused on the city of Cleveland specifically. The Commission was successful in many of their efforts, in part because their equity-based approach aligned closely with the political progressivism seen throughout Cleveland’s history. During the 1970s and early 1980s, the Commission made it their goal to provide employment opportunities for residents so that they could feed their children, provide transportation for

residents to get to their jobs, and ensure that affordable housing was available to rent or buy.

The Commission's efforts were by no means an official representation of the region's approach *as a whole*, but their highly visible and often successful initiatives made them a major player at the decision-making table and ensured that the 'Sharing the Wealth' approach was at least heard. Beyond the Planning Commission, the corporations, and city government officials, other important stakeholders include suburban, regional and state representatives, as well as union officials.

The suburbs, and the region as a whole for that matter, undoubtedly saw things from a different perspective. As one suburban county planner noted, outer portions of the region were experiencing changes of a different sort.

"We, in the suburbs, were doing pretty well. We were the recipients of most of the outmigration and disinvestment that was taking place in the city. Until very recently, the suburbs... were not suffering from many of the problems that the city was suffering from. In general, the income in suburban jurisdictions was substantially higher than in the city."

Though this interviewee does not mention it, racial disparity within the region was also on the rise. As outmigration was occurring, so too was a region-wide racial sorting of the population. While the population moved outward to the more prosperous suburbs, minorities remained in the central city.

Though they were far removed from the everyday challenges of the inner city, suburban constituents with jobs in the central city still cared that the region as a whole remained strong and stable. Similar to the response seen in

Milwaukee, one of the main regional development efforts to come out of this time period was the development of a land bank, which would allow the city to take title of, and subsequently land-bank, tax-delinquent and abandoned properties. Creation of the land bank required changing local, county and state laws. Interviewees noted that such changes would not have been possible without the formation of a regional effort. A planner from Cuyahoga County said that,

“Coalitions were very important for setting up a land bank. We had to study the problem of tax abandonment and change the state law on the ownership of real estate and you don’t do that without a coalition. We set up a coalition both across the state and across region to accomplish that. None of this would have been done without region-wide support.”

In the end, the Cleveland region exhibited an interesting, and multi-faceted response to deindustrialization. After experiencing low levels of manufacturing job losses, the region slowly began to respond to the impending restructuring. Region-wide, early efforts aligned most closely with the *‘Betting on the Basics’* approach, marked by a strong commitment to retaining existing heavy industry and remaining in the conservation phase. Later efforts, primarily in the city, coalesced around the issue of equity, and the creation of an economy and a community that was more accessible to all of Cleveland’s residents.

Conclusions

Though their experiences varied substantially and all had different assets and opportunities at the start, all three case study regions (as well as Detroit) chose to place their bets primarily on manufacturing by *‘Betting on the Basics.’* In each region, the gamble had a slightly different outcome; however, in the

end, none would be considered an obvious success. From these case studies emerge a series of observations about similarities across these regions and ruminations on the effectiveness of 'Betting on the Basics' in response to deindustrialization. Observations and lessons follow below.

Common Regional Characteristics

Together, with supporting quantitative data, these conversations aided in the identification of three common characteristics across these three regions and in Detroit. First, findings suggest that all of these regions were heavily dependent on manufacturing both psychologically and economically. Although we already know from Table 2 that these three regions were most dependent on manufacturing as a percent of total employment, the numbers say little, if anything, about the nature of that dependence. Interviewees from these three regions frequently described a situation in which regional leaders (and their constituents) had difficulty envisioning an economy that did not rely on manufacturing as their region's primary economic base. In other words, leaders found it difficult to either personally envision a future that moved away from such dependence or convince their constituents, customers or employees of such an alternative future. Though that may have been the case in *some* of the other cases in this multi-N study, it is true for *all* of the regions that ultimately subscribed to the 'Betting on the Basics' ideology.

Second, all of these regions, with the exception of Milwaukee, were heavily dependent on manufacturing jobs of a certain type: steel production and bending. For many interviewees, being so entwined in the fate of one particular sector of manufacturing was significant; it often created a sense of

community and brought with it the understanding that most families' wellbeing would rise and fall with the success of the steel industry. Hourly wages were much higher for steel production than other manufacturing jobs: 14.04 versus 8.33 dollars per hour in 1978, respectively (Crandall 1981, 90). Thus, many of these regions faced great difficulty when the global steel market collapsed during the mid- to late-1970s in the wake of the 1973 oil crisis and an increasingly saturated market for steel. As a result of this collapse, many steel mills in the United States Rust Belt were shuttered and many jobs were lost. Thus, for many Rust Belt regions, the decline of steel production and the loss of so many of these high-paying jobs would become the defining feature of their regional economy in the 1970s and 1980s. It seems fitting then that the majority of the regions who experienced such extreme losses might react similarly, in this case by 'Betting on the Basics.'

Third, all of these regions are located on the shores of one of the Great Lakes and none are their state's capital. Though it is beyond the scope of this study to determine whether there is a relationship between shorelines and economic growth, it seems plausible that those regions that share a border with one of the Great Lakes might experience higher levels of lake effect snowfall and lower levels of desirability or longer and deeper histories of heavy industry as a result. Without specifying causation, it's worth noting that *all* of the regions who elected to 'Bet on the Basics' are located on one of these lakes. *All* of these regions are also non-capital cities, meaning that their labor markets might be less diverse and less stable than their capital counterparts, where state government employment and capital act as a buffer against economic challenges (Markusen 1996). Determining causation in this regard is again

beyond the scope of this study. Nevertheless, establishing this link between these traits and the propensity to 'Bet on the Basics' may prove useful in future research.

Lessons Learned

Turning now towards lessons we might draw from these case studies, two main points emerge. The first is that 'Betting on the Basics', despite Markusen and Carlson's prediction, generally did not bode well for the regions that subscribed to it. Detroit, Milwaukee, Buffalo, and Cleveland all suffered greatly as deindustrialization unfolded and in the years that followed. Though some of these regions fared better than others and certain manufacturing corporations successfully weathered the storm, this approach as a whole did not benefit regions in the way that it was predicted to. Perhaps in anticipation of this potential disappointing outcome, Markusen and Carlson (1988) offered a warning about the difficulty in successfully executing this retention-based approach: "Any retention strategy which works will have to tackle the reticence of many Midwestern manufacturers to revamp their labor relations systems, to develop strategic planning, to engage in technological experimentation, and to market aggressively" (33). In Markusen and Carlson's opinion then, it is perhaps not the fault of the regions for choosing to 'Bet on the Basics' so much as it is the fault of the corporations for not adjusting to new economic realities. Nevertheless, the outcomes were not generally good for these regions or the firms that called them home.

Second, analysis of these interviews and related data suggest that the 'Betting on the Basics' approach was not often associated with adaptive resilience or

with 'good outcomes.' As Pendall, et al. (2010) reminds us, a reed is generally most resilient, or least breakable, when it bends. Likewise, adaptive resilience theory tells us that a region should experience the greatest levels of resilience when it, as a system, exhibits flexibility in a time of great flux. Flexible would not be the most appropriate way to describe the process of change in Detroit, Milwaukee, Buffalo, or Cleveland. To be certain, each of these regions did attempt to bend in their own way. Detroit activists tried to change the direction of economic development funding and prioritize a more equitable approach to development. In Buffalo, we saw the commissioning of the Arthur D. Little study and the formation of the Buffalo-Erie County Labor Management Council. In Cleveland, leaders working in the City of Cleveland Planning Commission fought diligently for transportation and employment opportunities to support the disenfranchised. And in Milwaukee, leaders came up with a creative solution to encourage development in the urban core. In the end, however, all four of these regions are known less for their progressive ideals or their creative solutions, than they are for their failure to adjust to the new realities of the post-industrial economy. If flexibility is indeed a positive attribute that is necessary for adaptive resilience and 'good outcomes', we can be fairly certain that these four regions did little in the way of encouraging it. By 'Betting on the Basics', these regions either ignored calls to diversify their economic base or lacked the tools and assets necessary to do so. For most of these regions, 'Betting on the Basics' (either by default or by choice) created an inflexible reed that ultimately made adaptation and 'good outcomes' a lot more difficult to achieve in the years to come.

CHAPTER 7

Turning the Corner – Indianapolis, Cincinnati, Columbus and Pittsburgh

In the face of an unfolding challenge like deindustrialization, many regions chose to stick with what they knew either because it felt safe, seemed easiest or was thought to be the only option available. In Buffalo, Detroit, Cleveland and Milwaukee, leaders did just that – they stuck with what they knew and chose to ‘Bet on the Basics.’ For other regions – namely, Cincinnati, Columbus, Indianapolis, and Pittsburgh – that had both the will and the means to take a different approach, regional leaders took steps to consciously move beyond what was easiest or what was familiar in hopes of reaching a better outcome. For the most part, doing so meant looking for alternatives to ‘Betting on the Basics’ by either ‘Bowing Out’, ‘Bidding Down’, or ‘Sharing the Wealth.’ For some of these regions, betting on these alternative approaches did pay off and the regional response to deindustrialization was favorable. In others, regional outcomes were not as positive. The goal of this chapter is to increase our understanding of how these four remaining regions arrived at their decisions to, by and large, not ‘Bet on the Basics’, and explore the extent to which doing so helped or hindered their region’s future prospects.

To be fair, regions do not always fit neatly within one box or another; many of the regional responses observed in the cases below may loosely apply to one or more categories. In some cases, a region’s response fit relatively well within one single category, as was the case in Buffalo and Detroit (‘Betting on the Basics’) as well as in Cincinnati, Columbus and Pittsburgh (‘Bowing Out’). Still

for other regions –Cleveland, Indianapolis and Milwaukee – the appropriate response was not so set in stone, and more than one type of response was observed. In such cases, a hierarchy is easily identified; that is to say that though each region may have responded in more than one way, one response type generally took precedence as the overarching approach. In Chapter 6, we saw elements of ‘Sharing the Wealth’ in Cleveland’s response to deindustrialization, however, ‘Betting on the Basics’ clearly emerged as the dominant agenda. As we will see in the discussion of Indianapolis below, ‘Betting on the Basics’ was clearly utilized but ‘Bowing Out’ also played a role in the region’s economic development response.

Chapter 7 starts with a brief introduction to the regions, their economies, and the processes by which they crafted their respective responses. I then discuss similarities and differences amongst this mixed group of regional responses. I then conclude the chapter with a series of lessons that we can draw from both the data collected and from subsequent analysis.

The Regions – Indianapolis, Cincinnati, Columbus, and Pittsburgh

In contrast to the case study regions discussed in Chapter 6, the regions discussed below all crafted a response that emphasized something other than ‘Betting on the Basics.’ Though elements of ‘Betting on the Basics’ are observed in some of the cases discussed below, these four regions are grouped together in this chapter because they all ultimately opted to move beyond a recreation of their region’s industrial past. In a sense, leaders in Indianapolis, Cincinnati, Columbus, and Pittsburgh tried to ‘turn the corner’ in hopes of better preparing their regions for the uncertainty of a post-industrial

economy. The process by which they arrived at this decision, and the extent to which their responses worked well for each region, will be the focus of this section. We begin first with Indianapolis, a region whose response once looked like ‘Betting on the Basics’ but changed over time to include the hallmark techniques of ‘Bowling Out.’

Indianapolis

Indianapolis, surprisingly, was a hotspot for automobile production in the early 20th century. Though that sector would fade to oblivion in the 1930s, it does help to explain the relatively strong manufacturing roots of the Indianapolis region. Despite being one of the more geographically peripheral Rust Belt regions of this study, the Indianapolis metropolitan region of the early 1980s looked a lot like the other regions than one might expect. In fact, manufacturing had always made up a significant portion of the region’s economic base; along with health care, software and telecommunications, the Indianapolis region placed great emphasis on the retention of firms related to industrial automation, instrumentation and test equipment, and consumer electronics during the 1970s (Hudnut 1995, 77). Despite looking a lot like a strategy to ‘Bet on the Basics’, the region ultimately shifted gears enough so that the region would actually be defined by its efforts to ‘Bow Out.’ Before we begin any discussion of this important transition, it’s first necessary to take a step back and examine the unique features of the Indianapolis region.

One of the characteristics that makes the Indianapolis case so interesting is the existence of Unigov, the consolidated city-county government that represents the City of Indianapolis and Marion County. The movement to

create Unigov began in the late 1960s, when Mayor Richard Lugar developed a plan to reduce duplication in services between the city and county governments. Unigov was created on January 1, 1970 by an act of the Indiana state legislature that allowed Indianapolis to expand its boundaries so that it encompassed the majority of Marion County. This expansion allowed for the elimination of many duplicated services and created the City-County Council. Though Unigov is generally not considered a uniform success, a 1995 study suggested that Unigov did enhance the effectiveness of economic development strategy involving public subsidization for private development (Blomquist and Parks 1995). Additionally, and perhaps more importantly, the mere existence of Unigov suggests that the region is not averse to innovative or more regional approaches to government. Even though Unigov does not represent a truly regional approach to governance – many of the suburban communities and counties are noticeably excluded – the merging of these two entities indicates a propensity to look for solutions beyond the urban core.

Further supporting this interest in a broader agenda was a regional non-aggression pact that most of the local governments agreed to. One former mayor of a suburban community noted that,

“There wasn’t a whole lot being done as a region. But one thing we did do was sign a non-aggression pact, whereby we said we would not try to cannibalize your prospect just so we can get the tax base in our city. The problem is that so many cities chase ratables, chase tax bases... So we signed an agreement with Unigov and many neighboring suburbs saying that, ‘If you’ve got an ED prospect, we aren’t going to try and raid it and jack up the sweeteners just so we can get it and you don’t. We are going to respect each other to promote ED for the whole of the region.’”

Such an arrangement undoubtedly played an important role in the deciding how to respond to the stresses seen as a result of industrial restructuring in

the late 1970s and early 1980s. As the region grappled with losses in manufacturing, they began to look to other industries for economic growth. Attraction strategies were an influential component of this transition in terms of economic development response. Knowing that this non-aggression pact would prevent inter-regional competition allowed for a more regional response to economic restructuring.

The story of economic restructuring in Indianapolis is an interesting one. As one former mayor of Indianapolis noted, the automobile industry had been an important part of the industrial base in the mid-20th century. In 1913, Indianapolis ranked second in the United States in automobile production. Since then, however, the industrial base has become highly diversified.

“We were pretty sanguine about the economic situation. We understood the importance of diversity. We had started as an automobile town. And then, because of the bankers’ hardening of the arteries, the auto companies moved to Detroit. By the 1970s we were pretty well diversified.”

Though it might not have felt like it at the time, an Indianapolis businessman noted that this ‘hardening of the arteries’ may have been a blessing in disguise.

“When the auto jobs began to leave town, we knew that we had to do something. In fact, even before they officially left, we had reason to believe that these shops weren’t going to stay around forever. We didn’t ignore this bad news. Instead, we tried to figure out other ways for Indianapolis to get ahead. Now, we know that we were lucky. We really dodged a bullet.”

Avoiding the plight of other over-specialized Midwestern regions, public sector leaders in the Indianapolis region took early and swift actions to diversify their economy and move towards reorganization. Rather than clinging to

automobile manufacturing or the other heavy industries that had been mainstays in the past, Indianapolis leaders chose an approach that most closely aligns with the 'Bowing Out' approach to economic development. Early efforts to reorganize the regional economy emphasized business attraction, indigenous entrepreneurship, and sports-based development strategies.

While the business attraction and entrepreneurship approaches were certainly useful to the Indianapolis economy, it is the sports-based development for which the region is best known. A former economic development specialist for UNIGOV pointed out that "We embarked on this sports strategy not as an end in itself but as a means to an end of economic development." In other words, the cultivation of sports-based development in Indianapolis was designed to complement the regional economy, rather than be the foundation on which everything else rested. Important components of this approach include the successful attraction of the Indianapolis Colts NFL team from Baltimore and continued loyalty of the NBA's Indiana Pacers, the construction of a downtown stadium and convention center, and the expansion of the Indianapolis Motor Speedway, which is home to the Indianapolis 500. As one former mayor notes, such moves were highly strategic.

"When we built the downtown stadium, it was the first time in the country that a stadium had been yoked into a convention center. And our determination was that we weren't going to build this out in a cornfield somewhere so that they can only play 12 days a year. We're going to make this an asset with a convention center...When the Colts finally came in 1984 that was icing on the cake. That was nice for me because politically there was a hell of a lot of risk building a big stadium that seats 62,000 people ... without a team to play there. After it was announced that the Colts were coming, downtown really perked up again."

To be certain, the sports-based approach has resulted in substantial gains for the Indianapolis region. A 1994 study found that Indianapolis is a unique case in that it was the only American city where the presence of professional sports teams exerted a “statistically significant, positive impact on the metro area economy” (Baade, 19). Baade (1994) attributes the positive impact to a combination of things, including the statewide tradition of sports involvement, the relatively small size of the region, and the “city’s commitment to defining itself as America’s sports capital, particularly for amateur sports” (Ibid, 19).

As these formidable investments imply, capturing the tourism and convention market was an *active* strategy pursued by city and regional leadership in the 1970s and 1980s. As Swindell, et al. (1995) suggest, “The city’s leadership had decided to change the image of Indianapolis through an extensive amateur sports emphasis that was joined with a downtown revitalization program. Together, sports and a new downtown were going to change Indianapolis’s image and improve economic development” (143). Building on the nearly century-long success of the Indianapolis 500, the region has actively transitioned to become a sports destination for events like the Super Bowl, NCAA Basketball Final Four, and regular games for the Colts and the Pacers, among others. Attracting conventions has also been another regional strategy put forth by local leaders. The Indianapolis region has also played host to numerous meetings including the Future Farmers of America (FFA) and Gen Con, a role-playing game convention.

Nevertheless, the sports-based development strategy has not been foolproof, especially in the long run. Numerous interviewees described today’s

Indianapolis as a region experiencing pronounced challenges. A former Marion County economic development official noted that many of the problems they had avoided in the past are now beginning to rear their ugly heads.

“I think we are now struggling to maintain the core....The problem is the people who have been moving to the suburbs, they suck the vitality out. We aren’t as bad as Pittsburgh is. But throughout the Rust Belt, you’ve got that same problem of people leaving. Whether or not they are going to return or if there is going to be an influx of new people, remains to be seen... the wealth and the power was moving out to the wealthier, cleaner suburbs....What can we do to keep people in town? I think we need to improve amenities and city services... It’s a never ending fight for urban America to compete with the suburban dream.”

Like so many of the other regions included in this study, the Indianapolis regional economy continues to struggle. In this case, however, the problem is less about the region’s economic legacy than it is about classic centrifugal forces pulling people and jobs outward. When compared to these other cases, it actually seems that Indianapolis has experienced a fair amount of success. Whether this success is the direct result of the region’s unique approach to economic development or some other factor is a question that remains unanswered. Nevertheless, it seems that the Indianapolis leaders’ conscious decision to adapt by moving away from ‘Betting on the Basics’ and towards a ‘Bowing Out’ approach likely played a prominent role in determining this region’s comparatively healthy economic path.

Cincinnati

Cincinnati’s regional economy saw significant growth in the production of pork, beer, soap, machine tools, and carriages during the early 20th century (Stradling 2003). Though the breweries and carriage production would largely taper off, firms specializing in meatpacking, soap-making, and machine tool

production would continue to fuel the regional economy through much of the 20th century. Cincinnati, which at one point was nicknamed Porkopolis, was the central processing point for pig farmers in Ohio, Indiana and beyond. Pigs would be brought into the region to be processed and packaged for shipment to other parts of the country. Incidentally, soap-making began as a way of utilizing the lard by-product from pork processing. One of Cincinnati's most important corporations – Procter and Gamble – initially began as a soap manufacturing firm in 1837. As one former city councilmember said, it remains one of the region's most powerful and productive firms today.

“P and G is the key company. The things P and G wants, it gets...It's a very thoughtful company and, fortunately, an enlightened company with great leadership. The community benefits from that.”

Because of its rather diverse assortment of industrial strengths, Cincinnati was not as dependent on heavy industry as the other case study regions. One former business leader in the region described how this diversity affected the region.

“We never really felt wholly dependent on one corporation or one sector. Looking back, I don't think we realized how lucky we were to not be the auto town or the steel town. We definitely struggled in our own way but it probably wasn't as bad as it could have been.”

So, as other regions grappled with severe losses in heavy industry, Cincinnati buried its head and plodded forward. An industrial base rooted in consumer goods and transportation helped the region to weather the stormy 1980s recessions. The region did, however, contend with many of the same land use problems as the other case study regions. During the mid-20th century, many of Cincinnati's largest companies moved outward from the urban core in

search of larger plots of land for their single-story plants. Even though the region felt fewer effects as a result of economic restructuring during the late 1970s and early 1980s, it still felt the effects of the national recessions and grappled with an outward dispersion of people and capital. As one former county commissioner noted, these centrifugal forces created an acrimonious political environment.

“The central county was decreasing while the outlying counties were growing bigger. The city was in competition with the rest of the county. The county commissioners were seen as anti-city and pro- part of the county. That was a real problem because we couldn’t get a whole lot done and we didn’t always cooperate.”

In spite of these difficulties, leaders in the central city did make an effort to respond to unfolding challenges, namely a decaying downtown and a hollowing out of the inner core. A former mayor during the early 1980s described one such effort.

“About that time, we commissioned a study called Cincinnati 2000. It was a ULI study that we commissioned to recommend to us what we should do about our core area... It urged us to concentrate on downtown living. We sort of ran afoul of the corporate chamber attitude, which was that we ought to continue to be a shopping destination and that we ought to be building more office buildings and maybe a few people would live downtown. I think the ULI had it correct.”

During the 1980s, as leaders grappled with abandonment in the downtown area, tensions grew between those who supported downtown living, those who desired downtown shopping, and those who wanted to ignore the downtown and focus on booming suburban areas instead. The Cincinnati 2000 plan, which urged support for increased residential opportunities downtown, never really gained full support from the region’s leadership. Instead, the idea to

make downtown a shopping destination won out. For better or worse, financial support was given to department stores, hotel developments and a convention center in the downtown area. In 1981, \$6 million dollars were used to bring a 500-room Hyatt Regency hotel near the expanded convention center. Despite such significant investment, interviewees described disappointing outcomes. A local business executive told of the many ways in which these investments came up short.

"We maintain the fiction that we still are a downtown shopping destination. In retrospect, [I think] we spent too much time ... trying to continue to be the downtown shopping destination and ignoring the reality of suburban shopping centers. We spent a lot of our public money subsidizing money in the Urban Development funds and all the rest, trying to make department stores work and trying to make downtown malls work."

In the end, a lot of time, energy and money were invested in downtown development and comparatively little was invested in responding to changes in the broader economy. In some ways, Cincinnati leaders' decision to 'Bow Out' actually looks more like a non-response; local leaders were not all that concerned with retaining heavy industry or creating a business-friendly environment. To the extent that they actively pursued any strategy at all, Cincinnati leaders seemed at least peripherally concerned with stewarding the newer, high-tech firms of the late 20th century. During the early 1980s, leaders made a relatively modest attempt to craft a vision for how this adaptation might unfold. The former mayor described this effort.

"I got some funding for a weekend conference out of town, 30 miles up the way in a place called Kings Island in the dead of winter. We had 100 people... representing a cross section of the community. From Friday night until Sunday, we doodled about what's good, what's bad, and what do we need to do. What are our goals and so forth. Some of the business-types that I asked to help fund this were very weary... In any event, we had some ideological cross section too. People talked about racism, employment and healthcare. At

the end of the two days we also said, we need to talk about economic development because without economic development, we can't drive all the rest of it ..."

Though very little came of the event in terms of policy change or collective decision-making, the mayor later described how the meeting helped in other ways.

"It was important that we had everyone in the room. Though I was disappointed that we weren't entirely effective, we did build up some goodwill... And that was really helpful for us down the road as we tried to take advantage of our machine tool industry and the changes that were taking place in that area. We could see ourselves as a place for high tech evolution of machine tools..."

Ultimately, Cincinnati did see an uptick in high-technology industries and a host of 'good outcomes' suggest that it weathered the storm of economic restructuring comparatively well. Some of its good fortune likely relates to the fact that it was not as dependent on heavy industry as many of the other case study regions were. It likely also benefited from the diverse industrial base that it had come to rely on. In the end, we can surmise that the Cincinnati response to the challenges of the late 1970s and early 1980s was to somewhat passively 'Bow Out.' Rather than focus specifically on subsidizing business or attracting heavy industry, city and regional leaders chose to focus on maintaining the region's diverse industrial base. Most researchers would probably say that doing so paid off for the region because even when the downtown development strategies failed, the region as a whole continued to prosper.

Columbus

In its early years, the Columbus region was settled largely by German and Irish immigrants. By the early 19th century, those who came to Columbus generally found a relatively stable and liberal community with an economy rooted in transportation, brewing, and, by the late 1840s, railroads. Because of its location at various inland crossroads, the Columbus region emerged as a major transportation nexus. As one former local official noted, this strategic inland position affected the regional economy in a variety of ways.

“Having five railroads here led to a transportation and foodstuffs-oriented economy... We had various rail yards, supply organizations and steel equipment, not steel mills but people who use steel and make it into things...We also did a lot of defense industry production but I guess we had a lot less of the heavy industry than most other Midwestern cities.”

For much of the late-19th century and early 20th century, the Columbus regional economy flourished as goods and people moved through the region. During World War II, the region played a large role in the production of naval defense equipment. As such, economic prosperity continued largely uninterrupted into the early post-war years, but as defense production slowed following WWII, the region was forced to consider its next course of action. As a local land use attorney described, a number of crucial decisions were made during this time period.

“The goal of the city administration, basically Mayor Jack Sensenbrenner, in the early 1960s was to figure out how to build a strong economic base without relying on heavy industry. Heavy industry... was not encouraged to be here. And that decision led to increasing support for the education network (we’ve got 11 universities within 30 miles), a major number of insurance companies here (Nationwide being the largest), and we had a lot of large banks until they started collapsing into various things...”

Columbus represents one of the few case study regions where leadership proactively and publicly adapted by moving away from heavy industry. In a sense, the Columbus region 'Bowed Out' before deindustrialization really even took hold in the Midwest. Though manufacturing never had the presence in Columbus as it did in other case study regions – manufacturing as a percent of total employment was the lowest here in all eight regions – it still fueled portions of the region's early economy. Other early industrial strengths included steel processing and carriage production. As the state capital and home to The Ohio State University, the region's economy has also benefited from the relatively stable employment base provided by government and the university.

Over the course of the 1970s, Sensenbrenner's earlier-laid plans began to take shape and the Columbus economic base gradually shifted to an economy based less on manufacturing and heavy industry and more on transportation, the movement of goods, and the production and distribution of clothing. One local businessman describes what this has meant for the region.

"We have become, recognizing that Columbus is in close proximity to much of the US population, a transportation-oriented distribution center for retail goods, money, insurance and education, all of which were in line with the original goals of Jack Sensenbrenner. Consequently, it has given us a pretty stable, non-boom and bust economy."

One of the main private sector players in this transition was Les Wexner, founder of The Limited Brand clothing company. A Columbus historian described Wexner's progression from startup to multinational corporation.

"In the late 1960s, a dreamer called Les Wexner started a woman's clothing store....The Limited Brands....As Wexner expanded into different apparel lines – and needed a huge supply of inventory – he created a distribution

system tied to cargo places from Southeast Asia. This then created, in the 1980s, a major distribution warehousing operation, not heavy industry at all....Everything coming in that was needed in their stores, repackaged and sent out by container to each of the particular stores in the chain, nationally."

The Limited Brands today represents a very important and expansive component of the Columbus economy. In the last few decades, the corporation has either bought or started numerous other retail brands, all of which have their headquarters in Columbus. They include: Victoria's Secret, Pink, Bath and Body Works, C.O. Bigelow, White Barn Candle Company and others. Other important clothing-related corporations also call Columbus home, including Hollister and Abercrombie and Fitch, as well as Retail Ventures, which is responsible for DSW, Filene's Basement, and Value City stores. Together, these clothing and retail companies make up a substantial portion of the economy and have played an important role in its diversification. Other notable corporations in the area include Wendy's (fast food restaurant chain), Chemical Abstracts Corporation (scientific information), and Worthington Industries (steel processing).

When asked what factors may have played a role in the relative success of the Columbus region, interviewees commonly mentioned two main factors: a policy of liberal annexation of surrounding land and an invested group of Columbus-area leaders. The move towards annexation began under the reign of Mayor Sensenbrenner, who wanted to avoid the landlocked fate of other Ohio cities. Beginning in the 1950s, Sensenbrenner used water as leverage; any developers outside of the city that desired water and utilities would have to either annex their land into the city or into a suburb whose service area was controlled by Columbus (Jacobs 1998). This policy protected the city's tax

base from the rampant suburbanization seen during this time period. One local developer described how this annexation policy strengthened the region and allowed leaders to control development within its boundaries.

“Sensenbrenner...had a policy of annexing anything. We’ll extend infrastructure out to it and build so that Columbus does not become surrounded by suburbs as in the case of Cleveland, Cincinnati, and Buffalo for that matter. In all of those instances, those urban cores were isolated by suburbia... The annexation policy was exceedingly successful and precluded Columbus from being surrounded, which meant it was able to capture the income tax base and control the type of development in Central Ohio; in other words, no big industry.”

Overall, the annexation policy has proven relatively successful. The city has increased its total land from 39 square miles at the beginning of annexation to 210 square miles today. This increase in land has brought both an increase in tax base and population. However, the playing field is not always even for those who live within city limits. Since the mid-1970s, people living in newly-annexed areas have been allowed to send their children to suburban schools, thereby reaping the benefits of being within city limits but avoiding the struggling Columbus Public School District. As one would expect, this policy has had a considerable effect on the region’s housing landscape. As Jacobs (1998) noted, “between 1980 and 1990, the total number of housing units inside the Columbus Public School District actually dropped 2.1 percent; during the same span, aggregate housing units in the city of Columbus increased 17.5 percent” (136). Population trends from this time period indicate a similar fate. Together, these numbers hint at the potential downside of Sensenbrenner’s decisions and suggest that while the policy may have been good for the region’s tax base, it was less beneficial in terms of regional equity.

Though Sensenbrenner was a powerful mayor, the annexation policy and numerous other policies, plans, and strategies would never have been possible without the backing of regional leadership group known as the Titans. This powerful group of civic leaders was highly influential in the decision-making process during the deindustrialization period and beyond. As one local historian and Columbus resident noted, this group shaped the region's trajectory in a variety of ways.

"The leadership condition downtown at that point, was primarily the local utilities, the major commercial retail interests, Nationwide and the other insurance companies, Wolf Industries, which is the media conglomerate... and then the Banks. All of those men knew each other well. Their biggest arguments were about how badly Ohio State was going to beat Michigan. You had a lot of people cooperatively working together and Sensenbrenner was closely involved with that. They were known as the Titans. It wasn't necessarily a fixed group; you just sort of knew something was happening. They were the ones that made the plan and then marketed it. Their ultimate goal was a strong, diversified and stable economy."

Little exists in the way of formal documentation of the Titans' work but interviewees agreed that the group had a lot of power over the development decisions made during the time period of this study.

Though local leaders must have been concerned with creating a good economic climate for their own businesses, the overall approach to regional economic development did not look much like the 'Bidding Down' approach or even the 'Betting on the Basics'. Instead, the group collectively sought a diverse economy and preemptively subscribed to the 'Bowing Out' approach to economic development. Though it would be rather difficult to determine whether the Columbus region's comparative success and abundance of 'good outcomes' was a result of having chosen this particular approach or just the

preemptive nature in which it was applied, the Columbus case offers us important insight into one region's unique response or *pre-response* to deindustrialization.

Pittsburgh

As was the case in many other of the case study regions, economic restructuring in the 1970s and 1980s proved extremely challenging for Pittsburgh leaders. What makes the Pittsburgh case slightly different from other regions, however, is the extent to which the region moved away from the corporatist governing model - influenced largely by the Allegheny Conference on Community Development - to a more inclusive public-private partnership style of governance. The new partnership included local and regional non-profits, universities, foundations and other community-based organizations. The partnership was largely brought about by neighborhood-level challenges to the Democratic machine, the Conference, and their collective disproportionate focus on downtown development (Detrick 1999). The new partnership coincided largely with the beginning of Mayor Richard Caliguiri's tenure and Pittsburgh's Renaissance II period, a follow-up downtown redevelopment strategy based loosely on the earlier Renaissance I plan that unfolded during the 1940s and 1950s. While Renaissance I "prevented Pittsburgh from becoming one of the problem cities of the 1960s by escaping the dire consequences of urban decline that befell such cities as Gary and Newark", Renaissance II saw the city, and its mayor, assume a more managerial role, acting as development facilitator for a more regional and a more inclusive group of civic and business leaders (Jacobs 2000, 89-90).

It was during the Renaissance II time period, the late 1970s and early 1980s, that Pittsburgh saw marked changes in the regional economy. Jobs were beginning to disappear from most sectors, the unemployment rate was on the rise, and various manufacturing plants closed their doors for good (Clark 1989, 47). Looking back on that time period and on the economic landscape of Pittsburgh during that time, there certainly were warning signs. A former local politician who worked in Allegheny County said that,

“In the late 1970s, the impending disaster was certainly apparent to anyone who wanted to think about it because we were far too dependent on heavy industry and becoming increasingly uncompetitive in those industries like steel, glass and aluminum.”

His concern highlights the increasingly apparent need to diversify the Pittsburgh economy, an idea that was not easily accepted at this point in time. Interviewees suggested that much of the general public either did not believe the predictions of the manufacturing sector’s demise or did not agree with the diversification strategies that were being proposed. One prominent businessman said that,

“At the community level there was a lot of conflict, a lot of disbelief that steel would ever disappear because you were talking about decades and generations of families that had relied on these jobs in the industrial base. You look at these giant factories and you think, no one is ever going to disinvest in that.”

At the same time, however, a small but growing number of concerned Pittsburgh residents and leaders began to lose faith. A public official working in the Governor Thornburgh’s office during this time period noted that,

“People were worried. Not the general public, but folks that were really looking at the economy were saying that we were too dependent on an industrial base that just isn’t going to be there decades from now...It was very apparent by the late 1970s, and really came home to roost in the early 1980s.”

As Pittsburgh grappled with the realities of economic restructuring in the late 1970s and early 1980s, pointed efforts to facilitate a stronger and more diverse economy were observed. Interviewees noted that such efforts were planned as part of a larger strategy to move the region as a whole towards recovery. Specifically, recovery strategies included a regional collaboration, and later a plan for development, known as Strategy 21. Strategy 21 began in 1985 as a partnership between the City of Pittsburgh, Allegheny County, the Allegheny Conference on Community Development (ACCD), Carnegie Mellon University, and the University of Pittsburgh. A 1990 plan that stemmed from this collaboration described the partnership as a “collective effort to think strategically about the directions that our region’s quality of life and economy are taking, and to implement the projects and programs that are most needed to help our communities adapt to the next century” (ACCD 1990, 1). An economic development official described the process behind the creation of this regional effort:

“The Mayor and County Commissioners, along with business leaders, and the two universities, put together in 1985, a plan called Strategy 21. They came to the state for major redevelopment assistance around a new airport, industrial site redevelopment, and so on. Basically, physical investment trumped education or workforce development. That’s evidence, if you will, that there was recognition that we had problems in this region and public and private sector entities had to respond.”

One of the major forces behind the creation of Strategy 21 was the ACCD. Though not considered the most inclusive organization, the ACCD was a powerful group that carried a lot of clout in the region. The ACCD originally formed in the 1940s as an effort to coordinate regional transportation and environmental efforts. By the 1970s and 1980s, this private sector leadership organization grew more concerned with the region’s economic future. Their

concern led the ACCD to be an important driver in the creation of Strategy 21. As part of the Strategy 21 team, the ACCD spearheaded efforts to bolster the urban core, develop the new Pittsburgh International Airport and found The Andy Warhol Museum. Such efforts were seen as a move towards a broader and more regional vision of the future.

Interviewees noted that, in general, Pittsburgh leaders were focused on diversifying their industrial base rather than committing solely to the revitalization of the manufacturing sector. Though leaders did not turn their back completely on the steel industry, in the 1980s they did place much more emphasis on development strategies geared towards research and development, insurance, and financial services. More specifically, strategies described by interviewees and indicated in plans from this time period suggest that the Pittsburgh region's collective approach aligned most closely with the 'Bowling Out' approach to economic development, meaning that the development of new and emerging industries was heavily prioritized.

Personal reactions to the substantial losses seen in the early 1980s differed, but generally speaking there was growing support for an alternative industrial structure. A native of Pittsburgh and former member of Governor Thornburgh's cabinet described the decision to change course.

"There is literally a cliff in 1982. And we fell off it. In some sense, people like Thornburgh could see that coming. That's why, at the state level, we were working around advanced technology strategies based on the idea that we had all these technical and knowledge strengths....We developed the Ben Franklin Partnership as an initiative to...take advantage of our R and D and our research universities in order to begin developing technology and knowledge-based jobs... this was the first partnership of that kind and it became a model that persists to this day."

Along with a non-profit called Innovation Works, which brought local universities together to receive state aid and other infusions of capital, the Partnership's efforts indicated a strong commitment to the diversification of the economy, which had long been over-reliant on the steel industry. Indeed, the industrial mix in Pittsburgh became far more diverse over the course of the 1970s and 1980s as the region looked towards education, healthcare and high-technology as future growth areas (Sbragia 1990). While efforts to diversify the economy have largely proved successful, the overall employment outlook was not always so positive. The number of jobs in the region has not grown in the past few decades. A former Executive Director of the Allegheny Conference described the tension between diversification and overall job creation.

"I think when people look at the overall economy, they say our employment hasn't grown and that's fair enough. But what has changed substantially is the mix in the employment base. We don't have any one employer that's big enough to cause that drop that we experienced in the early 1980s."

Though Table 3 indicates a mixture of both good and bad outcomes, interviewees suggested that the 'Bowling Out' approach was still somewhat helpful to the Pittsburgh region. As in any place experiencing industrial decline, the growing pains were significant. Overall, however, the Pittsburgh region adapted comparatively well to the challenges of the late 1970s and 1980s. It is important to note, however, that in the 1990s, regional employment began to fall behind the national average. Detrick (1998) suggests that this is due in part to a regional trend towards the old top-down, corporate-based planning process that was so prevalent in 1950s and 1960s Pittsburgh.

Conclusions

As the cases in this chapter attest, there were a variety of ways in which regional leaders could do something other than “Bet on the Basics.’ Though all would incorporate at least some element of ‘Bowling Out’, these four regions – Indianapolis, Cincinnati, Columbus, and Pittsburgh – all designed and then followed different paths on their way to recovery. Based on these variations in pathways and similarities uncovered across cases, I offer a series of findings and lessons learned from these regions and their respective responses.

Common Regional Characteristics

In these four regions where the decision was made to not ‘Bet on the Basics’, the most popular course of action was to ‘Bow Out’ either as a stand alone response or in combination with one of the other response types. To some extent then, the eight case study regions seemed to only select the option of ‘Betting on the Basics’ or ‘Bowling Out’ as their primary response type. Some of the regions in this chapter would choose to ‘Bow Out’ and pursue some other response type as well, but the main platform from which they operated was generally ‘Bowling Out.’ In Indianapolis, regional leaders started by ‘Betting on the Basics’ and then gradually shifted towards the ‘Bowling Out’ approach over time. In Cincinnati, Columbus, and Pittsburgh, ‘Bowling Out’ was pursued exclusively. It should be noted that though all four cases in this chapter pursued the ‘Bowling Out’ approach, the degree to which they consciously engaged in this type of adaptive response varied significantly. For instance, in Columbus, regional leaders actively pursued a strategy of diversification and a shift away from manufacturing. In Cincinnati, on the other

hand, leaders effectively chose non-response, acting as stewards of the new economy rather than advocates of any major economic development agenda.

Another commonality across most of these regions can be seen in the easy identification of a single leader or leadership group responsible for economic development decisions in the 1970s and 1980s. Indianapolis's Mayor William Hudnut was a central player in that region's shift to a tourism and sports-based development strategy. In Columbus, two leadership entities combined to make the important decisions: Mayor Jack Sensenbrenner in the late-1960s and early-1970s, and the Titans thereafter. And in Pittsburgh, many of the important decisions came from Mayor Richard Caliguiri and the ACCD. Cincinnati's leadership was less defined, which makes sense given the non-response we saw there. In all but one of these regions, there was an easily identifiable leader, or as Mayor Hudnut would say, "someone in charge of minding the store." Distinctive leadership played a very important role in taking stock of the region's assets and opportunities, gathering input from other local leaders and confidants, acting as liaisons between local, state and federal entities, and ultimately deciding how each region would pursue its own variation of the 'Bowling Out' strategy.

In general, regions that chose to 'Bow Out' were less dependent on manufacturing than their 'Betting on the Basics' counterparts. If we look back to Chapter 4 and examine the figures for manufacturing as a percent of total employment in each of these regions in 1970, we see that the four regions that 'Bet on the Basics' had a larger percent of jobs in manufacturing to begin with. The four regions that did not exclusively pursue this strategy were least dependent on manufacturing as a percent of total employment. Though such

figures provide little evidence in the way of causation, the association between lower levels of manufacturing and the decision to 'Bow Out' - or to concentrate on economic development strategies outside of traditional manufacturing - suggests that further study of this correlation is warranted.

Lessons Learned

Moving beyond commonalities and towards lessons we might draw from these four case studies, two main points emerge. First, this research suggests that among those regions that chose to 'Bow Out', the *regions that responded earlier to the unfolding challenges of deindustrialization were more likely to experience 'good outcomes' in the long run.* The benefits of an early response seem especially relevant in the cases of Columbus and Indianapolis, though their individual experiences differed greatly. In the case of Columbus, interviewees noted an early and conscious decision to move away from manufacturing as far back as the 1960s. Though we do not know whether this decision was pure luck or the result of serious deliberations and calculated projections, further exploration along those lines would be a useful line of questioning for future research. In the case of Indianapolis, the decision to 'Bow Out' was not as easy or as early as it was in Columbus. The Indianapolis region tried first to shore up its manufacturing base by utilizing techniques most commonly associated with 'Betting on the Basics.' Discouraged by the results of this push to retain manufacturing, leaders then shifted towards 'Bowling Out' strategies, emphasizing tourism and sports-based development strategies as a way of differentiating themselves from other Midwestern industrial regions. Despite the 'Betting on the Basics' detour, the region still made moves toward a 'Bowling Out' approach in the early 1970s, long before

many of the other regions even acknowledged that they had an impending problem. Once decided upon, the move away from manufacturing and towards alternative industries was deliberate and swift in both regions. Though the long-term benefits of this response are difficult to isolate from other potential reasons for their relative success, the relationship between the timing of a region's response and 'good outcomes' is certainly worth further exploration.

The second important finding from these case studies is that *innovative approaches – whether they worked or not – were almost always a part of the 'Bowing Out' approach*. Creative approaches to dealing with the problems of deindustrialization allowed many of these regions to ostensibly 'turn the corner' by recreating themselves or by leveraging their assets in new ways. Unlike many of the regions that chose to 'Bet on the Basics' by committing to a recreation of the past, many of the regional leaders discussed in this chapter were much more inventive when devising an economic development plan to move their region towards recovery.

As we saw above, the Indianapolis region analyzed their strengths and weaknesses, looked for an angle in which they might do well, and ultimately decided to build a new (and risky) downtown stadium as one major step towards their sports-based response. In Cincinnati, regional leaders took a gamble on downtown living and shopping; though this would not bode well for the region in the long run, it was still a relatively innovative approach at that point in time. Columbus leaders hedged their bets by adopting a policy of liberal annexation of surrounding lands to ensure that the region would not be

engulfed by suburban areas.¹⁴ And finally, leaders in Pittsburgh came up with Strategy 21, a plan that prioritized physical investment over things like education or workforce development. By all means this was a risky plan, but it was generally considered a success in that it targeted specific forms of development and asked other regional actors to help provide supplemental support.

In the end, we learn from the regions in this chapter that innovative and creative responses to deindustrialization, whether they worked or not, were generally part of most ‘Bowling Out’ responses. To the extent that such creativity is related to the flexibility of a region, the innovative responses associated with ‘Bowling Out’ might also relate to higher levels of adaptive resilience in these regions. The ability to bend, adapt, and come up with creative solutions to insidious problems is likely an important characteristic of adaptive resilience in regions.

Overall, what we learn from further examination of these cases (and the interviews conducted as part of this research) is that the gambles taken in each of these regions played out in different ways. From these case studies emerge a series of observations and ruminations on the effectiveness of various economic development responses to deindustrialization. Some regions turned the metaphorical ‘corner’ and found a new economic mix or focus, while others were less successful in their navigation of deindustrialization’s uncharted waters. Though all four regions would ‘Bow Out’ in some way,

¹⁴ Although annexation was utilized in Milwaukee, the Columbus region annexed land for residential, commercial and industrial whereas Milwaukee primarily annexed land for industrial development.

shape or form, no two regions 'Bowed Out' in the same way. Variations in both the decision-making processes and in the resulting outcomes encourage us to continue conducting research on regions, regional responses and regional change in the face of a challenge.

CHAPTER 8

Conclusions -To Reinforce History or Turn the Corner?

From these interviews and subsequent analyses emerge a plethora of important findings about the types of responses seen in these eight regions. Table 9 highlights the significant variation seen across regions in terms of response type and specific strategies. As we tally up the findings across cases, we see that ‘Bowing Out’ and ‘Betting on the Basics’ were the response types most often utilized during this time period. This suggests that the most popular approaches amongst these large Rust Belt regions was to either “fight or take flight.” In a sense, regions either ‘fought’ against deindustrialization by continuing to target existing heavy industry for economic development initiatives or ‘fled’ by abandoning the struggling manufacturing sector and focusing on other industrial sectors for development. Though elements of ‘Bidding Down’ and ‘Sharing the Wealth’ were seen in some of the case study regions, regional actors were far more likely to choose one of the aforementioned approaches.

Table 9 - Selected Characteristics of Regional Responses to Deindustrialization

	Response Type(s)	Notable Characteristics of Regional Response
Buffalo	Betting on the Basics	- labor/ management conflicts - retention focus
Cincinnati	Bowing Out	- early diversification - downtown development
Cleveland	Betting on the Basics (Sharing Wealth)	- political progressivism - land bank - emphasis on equity
Columbus	Bowing Out	- early diversification - transportation, clothing production and distribution - annexation
Detroit	Betting on the Basics	- committed to automobile - workforce development - fragmented region
Indianapolis	Bowing Out, (Betting on the Basics)	- Unigov - non-aggression pact - sports-based tourism - active diversification
Milwaukee	Betting on the Basics	- high-tech manufacturing - annexation and land banking - workforce development
Pittsburgh	Bowing Out	- diversification - focus on new and emerging industries - Allegheny Conference

Revisiting Hypothesis 1

Turning to measures of performance, of both the quantitative and qualitative means, we see subtle variation across cases. Recall that the first hypothesis proposed in Chapter 3 predicted that *regions in which leaders committed to manufacturing by 'Betting on the Basics' will not adapt as readily or as well as regions where leaders pursued other alternatives*. The quantitative data

presented in Chapter 4 suggest that the four regions whose leaders chose to 'Bet on the Basics' were amongst the worst performers in both the response and recovery periods, meaning that they did not exhibit adaptive resilience, at least in terms of the quantitative data. However, if we look back to the findings from the qualitative data presented in Chapters 5 through 7, the results are mixed. This data similarly suggest that Buffalo and Detroit predictably exhibited lower levels of adaptive resilience. The data on Cleveland and Milwaukee, however, paint a slightly more optimistic picture. In Cleveland, where 'Sharing the Wealth' was also incorporated into the economic development response, interviewees described regional improvements in terms of equity and workforce development. In Milwaukee, the region that quite literally 'Bet on the Basics', interviewees similarly described the innovative approaches used to retain and expand manufacturing in the region, a technique that has worked fairly well for the region in recent years.

When Markusen and Carlson (1988) developed this typology, the authors presented an argument that was the near polar opposite of my first hypothesis. At that time, the authors wrote that "'Betting on the Basics' may offer greater prospects for long-term success" (1). Based on the findings from this study, their assertion holds true in only some of the case study regions. Milwaukee and Cleveland have seen modest population growth and a moderately successful transition from heavy industry to a more high-tech economic base. On the other hand, the regional economies of Buffalo and Detroit have suffered great losses in recent decades and a hollowing out of the population continues to plague both regions. These mixed results suggest that further

investigation along these lines would be a useful contribution to future research.

We move now beyond 'Betting on the Basics' to the other preeminent approach - 'Bowling Out' - which was employed in four regions: Cincinnati, Columbus, Indianapolis, and Pittsburgh. In these four regions, the general consensus of regional leadership was that the manufacturing sector's heyday was largely in the past. Regional leaders generally believed that heavy industry had peaked and that it was time to think about ways to 'turn the corner' and explore other options to anchor the regional economic base. 'Bowling Out' afforded regions the opportunity to pursue these other options, like transportation and clothing distribution in Columbus, sports-based tourism in Indianapolis, or consumer goods and retail trade in Cincinnati. With the exception of Pittsburgh, the diversification strategy seems to have paid off for most of these regions as indicated by the 'good outcomes' seen in terms of population growth and modest improvements in equity.

If we think about the figure-8 diagram used in the adaptive cycle model (Figure 2), we can imagine the 'Bowling Out' approach as a deliberate attempt to 'turn the corner' and move beyond the uncertainty of the reorganization phase and into the exploitation phase, a period of growth and opportunity. On the other hand, we can imagine that those regions that chose to 'Bet on the Basics' struggled against global forces to maintain the stability of the conservation phase. Unfortunately, for most of these regions, the rigidity associated with the conservation phase ultimately proved to be quite detrimental. In a place like Detroit, which for many decades appeared to have prolonged its stability in the

conservation phase, the rigidity associated with such intense specialization likely triggered the region's precipitous fall in later decades. Though the qualitative data presented in this research do not prove causation, the findings do suggest a need to further explore the association between 'turning the corner' ('Bowing Out') and adaptive resilience.

Revisiting Hypothesis 2

Further consideration should also be given to the second hypothesis proposed in Chapter 3, which stated that *adaptive resilience will be seen in regions where leaders responded to early signs of deindustrialization and quickly developed an appropriate economic development response*. Again, the results seen in the quantitative and qualitative data are mixed. In Detroit, where the response remained largely unchanged throughout the late 1970s and 1980s, there was little haste. Though most interviewees recalled early conversations about the problems facing the region, very few remember any type of early strategic plan to move the region towards recovery. For most of the time period of interest, leaders in Detroit chose a veritable non-response approach by continuing on the same trajectory, giving incentives to large automobile corporations and supporting workers where they could. Their response was not only slow, but it also lacked the insight and strategy that a more successful response might have had. A similarly sluggish and lack-luster response was also seen in Buffalo, where leaders spent a lot of time and energy debating how to respond with very little to show for it in the end. In Cleveland, the response was a little more organized but still quite sluggish. The region would wait until 1982 to commission a Rand report on that status of the regional economy. Although ultimately well thought out, the 'Betting on the Basics'-type

response occurred a little too late. Even later (but slightly more effective) were the attempts made to 'Share the Wealth' in the Cleveland region. The delayed response in Cleveland may be explained in part by the relatively slow pace with which the region lost manufacturing jobs. Whereas other regions saw sudden drop offs in manufacturing, Cleveland's losses were slower to unfold.

Rounding out the regions that 'Bet on the Basics', a slightly more expedient response was seen in Milwaukee, where regional leaders began annexing and banking land in the 1950s and 1960s for later industrial development efforts. Though some interviewees described this effort as a gamble that happened to pay off, it is undeniable that there was some amount of foresight involved in crafting this type of early response. Leaders heeded the warning that challenges loomed ahead and put into place a plan to make the region more attractive to manufacturing firms. Milwaukee's efforts to get ahead of the curve were part of a conscious decision to use economic and industrial development tools to respond to the challenges of deindustrialization. Though the region's response and recovery resilience was not the best of the case study regions, the Milwaukee region fared relatively well - often times right around the mean - considering its disproportionately high dependence on manufacturing. Qualitatively, the region's flexible and innovative approach to 'Betting on the Basics' suggests that the region exhibited at least some elements of adaptive resilience in the face of deindustrialization; like the example of the reed in the wind, the Milwaukee region was better situated to bend rather than break during the 1970s and 1980s.

Turning now to an examination of the timing of responses seen in those regions that 'Bowed Out', we again see rather mixed results. Among the more sluggish responders were Pittsburgh and Cincinnati. In Pittsburgh, regional leaders were slow in their response because many believed that manufacturing losses were cyclical, rather than structural. Though the region would eventually shift directions by moving towards a public private partnership model that would ultimately encourage the region to 'Bow Out', the response was slow and the region suffered greatly while leaders decided what to do and how to do it. In Cincinnati, non-response was the order of the day. Leaders in that region acted as stewards, rather than shapers of the 'Bowing Out'-like response. By and large, that non-response paid off for the region; Cincinnati performed better than the mean on all of the recovery period measures.

Though their strategies and regional outcomes varied greatly, leaders in both Indianapolis and Columbus were relatively pro-active in their response to deindustrialization. Flexibility was the hallmark of the response seen in Indianapolis. Because of very early retention efforts in that region, the regional response initially looked like 'Betting on the Basics.' However, regional leaders described how a quick and decisive change in plan during the 1970s set the region on a very different path. Responding to early losses in manufacturing, regional leaders decided to pursue a sports- and tourism-based development agenda instead. This change in approach worked fairly well for the region in the long run, largely isolating it from many of the economic challenges of the past few decades. A similar change in direction was also pursued in Columbus, albeit at a much earlier point in time. Columbus leaders, foreseeing

some of the challenges associated with an overly-specialized economy, opted to diversify their economy before the term deindustrialization had even been written about. In the ultimate preemptive strike, Columbus leaders began to 'Bow Out' in the early 1960s, long before any other region in this study. Early efforts to diversify their economy appear to have paid off, as the region fairs well on most qualitative and quantitative indicators of adaptive resilience.

In the end, we see that findings related to the second hypothesis are slightly more conclusive than in the first hypothesis. Though some confusion remains in terms of timing, the responses seen in the eight case study regions suggest that there is an underlying pattern. Many of the regions that responded swiftly did exhibit adaptive resilience; namely, Columbus, Indianapolis, and Milwaukee. Other regions – including Buffalo, Cleveland, Detroit, and Pittsburgh - reacted less quickly, either because they lacked the wherewithal, authority, consensus, or gumption to do so. In these regions, some adaptive resilience was observed but less than in those regions that acted swiftly. And in Cincinnati, where manufacturing was slightly less important to the regional economy, non-action is the best way to describe the region's relatively successful non-response to deindustrialization.

Remaining Questions and Future Research

Data collected for the purposes of this research have been quite useful in terms of identifying the different economic development approaches that regions used to respond to deindustrialization. However, like any good research project, additional research questions have revealed themselves over the course of this exploration. Though the above research hints at some

potential answers, it is beyond the scope of this study to sufficiently address these questions here. Nevertheless, these remaining questions should serve as the basis for exciting future research on regions, resilience and deindustrialization.

One of the more interesting findings from this research is the finding that the types of actors sitting at the decision-making table varied greatly across cases. In some regions, the public sector wielded a heavy hand in the crafting of a response. In others, the private sector called the shots. In most regions, it was a combination of public, private and civic sector leaders that decided how to proceed. Given the sheer variety seen in terms of actors, one might be inclined to ask how certain types of decisions were made. More specifically, we might ask where the foresight to 'turn the corner' comes from. Or, why did some regions decide to 'Bow Out' while others chose to 'Bet on the Basics'? How did regional leaders in Indianapolis and Columbus foresee the need to diversify their industrial bases? Knowing more about where this insight came from, and why only some regional leaders had it, would be immensely helpful to researchers and practitioners alike.

Another question raised by this research is whether racial segregation played a role in how regions responded to deindustrialization. Amongst regions that 'Bet on the Basics', racial segregation was quite prevalent. This begs the question of whether racial divisions within these regions affected how and how well these regions responded to the challenges of deindustrialization. Though some interviewees discussed problems of racial division and even racism within their regions, their accounts were by no means conclusive. Further

investigation along these lines would be helpful to researchers and practitioners alike.

If we move from demography to geography, an additional set of questions emerge. Knowing that policies of annexation featured so prominently in at least three of the case study regions, we must ask if regional geography relates to how well a region has fared in light of deindustrialization. In Detroit, Buffalo, and to some extent in Pittsburgh, being 'boxed in' by surrounding suburbs acted as a serious impediment to economic development. Expansive, shovel-ready sites were not generally available to corporations looking to locate or expand in the central cities. On the other hand, in Milwaukee, Columbus and to some extent, Indianapolis there were deliberate and often aggressive policies to annex land. In most cases, this annexation helped improve these regions' chances of fiscal stability in the central city, which was the anchor in most of these regions. Whether this economic development strategy of early annexation (before it became impossible) was the reason for the slightly better outcomes in these three regions is a question that certainly merits further study.

Having discovered that adaptive resilience was more likely in those regions that chose to 'Bow Out', it's not too far of a stretch to imagine that certain regional benefits likely accompanied that type of response. It's a little more difficult, however, to imagine the potential benefits associated with the other popular response: 'Betting on the Basics.' In other words, we are still left wondering, what (if any) are the benefits of 'Betting on the Basics'? Though

the response as a whole was generally associated with lower adaptive resilience, the approach could not have been completely without merit. The in-depth case study of Detroit provided ample evidence of potentially resilient outcomes in a region where the over-arching approach was still 'Betting on the Basics.' Markusen and Carlson (1988) also predicted potential benefits associated with the retention-oriented 'Betting on the Basics' approach. So, even though the response type was not generally associated with adaptive resilience, certain elements of this approach were likely quite effective for regions adapting to deindustrialization. Knowing more about what worked and what did not would be useful to regions confronting similar challenges in the future.

Perhaps the most important remaining question is the question of how useful these findings really are. Or, in other words, what are the implications of this research for future economic development responses to slow-burning challenges? Though we cannot guarantee that every practitioner and policy-maker will find these conclusions useful for their own regional challenges, there are certain elements of this research that will likely be helpful to anyone thinking about economic development responses to slow-burning challenges of the future. For instance, it may be useful to practitioners and researchers to know that, when faced with a slow-moving challenge like deindustrialization, most regional leaders will take steps to better position their region moving forward. Regions generally are quite capable of adaptation, reminding us that adaptive resilience is a useful lens through which we can examine regional responses. The adaptive resilience concept is most useful when both quantitative and qualitative measures are incorporated; examining only one

type of measure often masks some of the more subtle nuances of a given regional response.

In the end, we saw that the degree to which a regional economy was rooted in manufacturing likely played an important role in how much response and recovery resilience was exhibited in that region. Manufacturing, therefore, has a rather strong legacy, one that is often difficult to escape from. Still, some regions were able to move beyond their manufacturing legacy and from their responses emerged another set of important lessons. In Chapters 5 through 7, we saw that regional responses of a more creative variety are more likely to be associated with adaptive resilience than responses that focused solely on recreating the past. In terms of timing, swift responses were generally more likely to be associated with adaptive resilience than slower responses.

Together, these findings suggest that we have indeed increased our understanding of how Rust Belt regions responded to the challenges of deindustrialization. More specifically, we find that the typologies designed by both Markusen and Carlson (1988) and Clavel and Kleniewski (1990) are quite useful in helping us to better understand regional responses to deindustrialization. Though numerous questions about causation still remain, the typologies prove to be extremely useful for studies of economic development responses in regions experiencing economic restructuring. Findings from this study indicate that there was no one uniform response to deindustrialization across Rust Belt regions. Regions varied greatly in terms of the choices they made and the paths that they followed. As a result, some regions fared better than others and some still search for the higher road. This

study has helped us to identify commonalities across cases and group regions based upon the type of response they employed. Doing so brings us one step closer to understanding how regions might successfully respond to long-term economic challenges in the future.

APPENDIX

Sample Interview Guide - All Regions

**This form was used to interview former and current economic development officials in deindustrializing regions. My primary intention was to glean information about the local effects of deindustrialization, the causes of this trend, and the ways in which their community chose to react to it (including policy recommendations).*

I'd like to talk with you about your (city/region/town/etc...)’s experience with deindustrialization. I'd also like to ask about the changes you saw/have seen in the economic climate of your area and ask how your office/group responded to those changes. I have asked you to sign a consent form. If there are any questions that you do not care to answer, please let me know.

DEINDUSTRIALIZATION

- 1) How would you describe the economic climate of your community in the 1970s?

PROBE

A) What were its main strengths at that time?

B) Weaknesses?

- In the 1980s?

- Today?

PROBE

A) What are the current strengths of your local economy?

B) Weaknesses?

C) How have these changes over time?

- 2) Could you tell me a little more about the changes that took place between then and now?

- 3) Could you tell me why you think that these changes occurred?

PROBES

A) When did these changes occur?

B) Did you anticipate any or all of these changes?

C) If so, how and when did you react?

- 4) What have been the main effects of deindustrialization on your {city/town/region}?

PROBE

A) Demographic changes

B) Industrial structure

- C) Fiscal health
- D) Labor force
- E) Overall economy
- F) Civic
- G) Social

RESPONSES

- 1) What have been the specific types of policies, programs and/or strategies that you have implemented to address deindustrialization?
PROBE
 - A) Did you concentrate resources on high-tech, sunrise industries instead of manufacturing?
 - B) Did you focusing efforts on decreasing the cost of doing business in your region?
 - C) Did you emphasize the retention and expansion of existing industries?
 - D) Were any efforts made to redistribute gains made from the service sector growth seen in your community?

- 2) Could you tell me a little more about the level(s) of governance at which these policies were implemented?

PROBE
 - A) What was your relationship with surrounding communities (ie. suburbs, cities, other municipalities?)
 - B) Were regional efforts considered?
 - C) If so, what did they consist of?
 - D) Who did they involve?
 - E)

- 3) Who was involved in these policy changes?

- 4) Which of these were most successful for your community?
 - How was success measured?
 - How did success vary over time?

- 5) How has economic development policy changed to reflect the combined pressures of deindustrialization and globalization?
PROBE
 - Scale?
 - Focus?

- 6) How would you rate the current economic performance of your {city/town/region} today?

REFERENCES

- Aduddell, Robert M. and Louis P. Cain. 1981. *Chicago's Future Service Economy Revisited*. Urban Insight Series (Loyola University of Chicago: Center for Urban Policy) 9.
- Allegheny Conference on Community Development. 1990. *Strategy 21: Competing in a World Economy – Environment, Access, Jobs Advanced Technology* (Pittsburgh).
- Allen, John and Allan Cochrane. 2007. "Beyond the Territorial Fix: Regional Assemblages, Politics and Power." *Regional Studies* 41(9): 1161–1175.
- Armstrong, Melissa. 2007. "A Deeper Look into Our Auto Industry: The Detroit Region Continues to Maintain Its Edge as One of the Top Manufacturers of Cars and Car Parts in the United States." *Detroit* 98(1): 50-52.
- Baade, Robert A. 1994. "Stadiums, Professional Sports, and Economic Development: Assessing the Reality," *Heartland Policy Study*, March 28 (62): 1-39.
- Bachelor, Lynn W. 1998. "Stadiums as Solution Sets: Baseball, Football and the Revival of Downtown Detroit." *Policy Studies Review* 15(1): 89-101.
- Berke, Philip. R. and Thomas. J. Campanella. 2006. "Planning for Postdisaster Resiliency." *The Annals of the American Academy of Political and Social Science* 604(1): 192-207.
- Berkes, Fikret and Carl Folke. 1998. *Linking Social and Ecological Systems: Management Practices and Social Mechanisms for Building Resilience* (New York: Cambridge University Press).
- Birch, Eugenie. 2002. "Having a Longer View on Downtown Living." *Journal of the American Planning Association* 68(1): 5 – 21.
- Blomquist, William and Roger B. Parks. 1995. "Fiscal, Service, and Political Impacts of Indianapolis-Marion County's Unigov." *The Journal of Federalism* 25(4):37-54.
- Bluestone, Barry and Bennett Harrison. 1982. *The Deindustrialization of America* (New York: Basic Books).

- Bluestone, Barry. 1984. "Is Deindustrialization a Myth? Capital Mobility versus Absorptive Capacity in the U.S. Economy." *Annals of the American Academy of Political and Social Science* 475: 39 - 51.
- Bonanno, George A. 2004. "Loss, Trauma, and Human Resilience: Have We Underestimated the Human Capacity to Thrive After Extremely Aversive Events?" *American Psychologist* 59(1): 20-28.
- Branson, William. 1983. "Myth of De-industrialization." *Regulation* 7(5): 24 – 29.
- Burbank, Matthew J., Greg Andranovich, and Charles H. Heying. 2002. "Mega-Events, Urban Development, and Public Policy." *Review of Policy Research* 19(3): 179 – 202.
- Bureau of Labor Statistics. 2008. Occupational Employment and Wages in Detroit and Grand Rapids, May 2007
<<http://www.bls.gov/ro5/oesdetgr.htm> >
- Carpenter, Stephen R., Frances Westley, and Monica Turner. 2005. "Surrogates for Resilience of Social-ecological Systems." *Ecosystems* 8(8): 941–944.
- Christopherson, Susan and Jennifer Clark. 2007. "Power in Firm Networks: What it Means for Regional Innovation Systems." *Regional Studies* 41(9): 1223 – 1236.
- Christopherson, Susan. 2010. "Never Let a Good Crisis Go to Waste: Re-Imagining Resilience in the Light of the Great Recession." *Critical Planning Theory, forthcoming*.
- Clark, Gordon. 1989. "Pittsburgh in Transition: Consolidation of Prosperity in an Era of Economic Restructuring" In Robert Beauregard (Ed.) *Economic Restructuring and Political Response* (Newbury Park: Sage Press) 41 - 69.
- Clavel, Pierre and Nancy Kleniewski. 1990. "Space for Progressive Local Policy: Examples from the U.S. and the U.K." In John Logan and Todd Swanstrom (Eds.) *Beyond the City Limits* (Philadelphia: Temple University Press) 199 – 236.
- Cohen, Cathy J., and Michael C. Dawson. 1993. "Neighborhood Poverty and African American Politics." *The American Political Science Review* 87(2): 286-302.

- Cooke, Philip, and Kevin Morgan. 1998. *The Associational Economy: Firms, Regions, and Innovation* (New York: Oxford University Press).
- Coppedge, Michael. 1999. "Thickening Thin Concepts and Theories: Combining Large N and Small in Comparative Politics." *Comparative Politics* 31(4): 465 – 476.
- Corsetti, George L. 1983. *Poletown Lives*. Videocassette. Information Factory.
- County Business Patterns. 2003. Retrieved August 7, 2009 from the University of Virginia, Geospatial and Statistical Data Center:
<http://fisher.lib.virginia.edu/collections/stats/cbp/>.
- Cox, Kevin and Andrew Mair. 1988. "Locality and Community in the Politics of Local Economic Development." *Annals of the Association of American Geographers* 78(2) 307 – 325.
- Crain's Detroit Business. 2008. "Crain's Dream Board."
 <<http://www.crainsdetroit.com/files/mostpowerful/db.html>> accessed on January 27, 2008.
- Crandall, Robert W. 1981. *The U.S. Steel Industry in Recurrent Crisis* (Washington, DC: Brookings Institution Press).
- Crandall, Robert W. 1996. "From Competitiveness to Competition: The Threat of Minimills to Large National Steel Companies." *Resources Policy* 107 – 118.
- Crump, Jeff R. and Christopher Merrett. 1998. 'Scales of Struggle: Economic Restructuring in the US Midwest.' *Annals of the Association of American Geographers* 88(3): 496 – 515.
- Cusumano, Michael A., Yiorgos Mylonadis, and Rosenbloom, Richard S. 1992. "Strategic Maneuvering and Mass-Market Dynamics: The Triumph of VHS over Beta." *The Business History Review* 66 (1): 51-94.
- Dahl, Robert. 2005. *Who Governs? Democracy and Power in an American City* (New Haven: Yale University Press).
- Darden, Joe T., et al. 1987. *Detroit, Race and Uneven Development* (Philadelphia: Temple University Press).
- David, Paul A. 1985. "CLIO and the Economics of QWERTY" *The American Economic Review* 75(2): 332-327.

- Davies, Jonathan S. 2002. "Urban Regime Theory: A Normative-empirical Critique." *Journal of Urban Affairs* 24(1): 1-17.
- DeFillippis, James. 2001. "The Myth of Social Capital in Community Development" *Housing Policy Debate* 12(4): 781-806.
- Deitz, Richard and James Orr. 2006 "A Leaner, More Skilled U.S. Manufacturing Workforce." *Current Issues in Economics and Finance* 12(2): 1- 7.
- Demetriades, Panicos and Khaled Hussein. 1996. "Does Financial Development Cause Economic Growth? Time-series Evidence from 16 Countries." *Journal of Development Economics* 51(2): 387 – 411.
- De Socio, Mark. 2007. "Business Community Structures and Urban Regimes: A Comparative Analysis." *Journal of Urban Affairs* 29(4): 339 – 366.
- Detrick, Sabina. 1999. "The Post Industrial Revitalization of Pittsburgh: Myths and Evidence." *Journal of Planning Literature* 34(1): 4-12.
- DiGaetano, Alan. 1997. "Urban Governing Alignments and Realignments in Comparative Perspective Developmental Politics in Boston, Massachusetts, and Bristol, England, 1980-1996." *Urban Affairs Review* 32(6): 844-870.
- DiGaetano, Joe, and Paul Lawless. 1999. "Urban Governance and Industrial Decline: Governing Structures and Policy Agendas in Birmingham and Sheffield, England, and Detroit, Michigan, 1980-1997." *Urban Affairs Review* 34(4): 546-577.
- Dillaway, Diana. 2006. *Power Failure: Politics, Patronage, and the Economic Future of Buffalo*, New York (Amherst, NY: Prometheus).
- Dohse, Knuth, Ulrich Jurgens, and Thomas Nialsch. 1985. "From "Fordism" to "Toyotism"? The Social Organization of the Labor Process in the Japanese Automobile Industry." *Politics & Society* 14: 115-146.
- Donaghy, Kieran. 2007. "Globalization and Regional Economic Modeling: Analytical and Methodological Challenges." In R. Cooper, K. Donaghy and G. Hewings (Eds.) *Globalization and Regional Economic Modeling* (New York: Springer).
- Farley, Reynolds, Charlotte Steeh, Tara Jackson, Maria Krysan, and Keith Reeves. 1993. "Continued Racial Residential Segregation in Detroit:

- "Chocolate City, Vanilla Suburbs" Revisited." *Journal of Housing Research* 4(1): 1-38.
- Farley, Reynolds, Sheldon Danziger, and Harry L. Holzer. 2000. *Detroit Divided* (New York: Russell Sage).
- Fasenfest, David. 1986. "Community Politics and Urban Redevelopment: Poletown, Detroit and General Motors." *Urban Affairs Quarterly* 22(1): 101 – 123.
- Fasenfest, David and James Jacobs. 2003. "An Anatomy of Change and Transition: The Automobile Industry of Southeast Michigan." *Small Business Economics* 21: 153–172.
- Federal Deposit Insurance Corporation. 2009. "Recession Adds to the Long-Term Manufacturing Challenges in the Industrial Midwest." *FDIC Quarterly* 3(1): 27-29.
- Fleischmann, Arnold and Joe R. Feagin. 1987. "The Politics of Growth-Oriented Urban Alliances: Comparing Old Industrial and New Sunbelt Cities." *Urban Affairs Quarterly* 23: 207 – 232.
- Foster, Kathryn A. 2010. "Regional Resilience," *Journal of the American Planning Association* (forthcoming).
- Fung, Archon and Scott Zdrzil. 2004. "Ecologies of Workforce Development in Milwaukee." In Robert P. Giloth (Ed.) *Workforce Development Politics: Civic Capacity and Performance* (Philadelphia: Temple University Press) 75 – 101.
- Georgakis, Dan and Marvin Surkin. 1999. *Detroit: I Do Mind Dying: A Study in Urban Revolution* (Cambridge, MA: South End Press).
- Giloth, Robert P. and Robery Mier. 1989. "Spatial Change and Social Justice: Alternative Economic Development in Chicago" In Robert Beauregard (Ed.) *Economic Restructuring and Political Response* (Newbury Park, CA: Sage) 181 – 208.
- Glazer, Sydney. 1965. *Detroit: A Study in Urban Development* (New York: Bookman).
- Gottlieb, Paul D. 1994. "Amenities as an Economic Development Tool: Is there Enough Evidence?" *Economic Development Quarterly* 8(3): 270 – 285.
- Hall, Peter. 2002. *Urban and Regional Planning* (New York: Routledge).

- Harte, E. Wendy, Iraphne Childs, and Peter Hastings. 2009. "Imizamo Yethu: a Case Study of Community Resilience to Fire Hazard in an Informal Settlement Cape Town, South Africa." *Geography and Environmental Studies* 47: 142 – 154.
- Heathcott, Joseph. 2005. "Urban Activism in a Downsizing World: Neighborhood Organizing in Post-Industrial Chicago." *City and Community* 4(3): 277 – 294.
- High, Steven, 2003. *Industrial Sunset: The Making of North America's Rust Belt, 1969 – 1984* (Toronto: University of Toronto Press).
- Hill, Edward. 1995. "The Cleveland Economy: A Case Study of Economic Restructuring" In W. Dennis Keating, Norman Krumholz, and David C. Perry (Eds.) *Cleveland: A Metropolitan Reader* (Kent, OH: The Kent State University Press) 53 – 86.
- Hill, Edward, Howard Wial and Harold Wolman. 2008. "Exploring Regional Economic Resilience." *The Brookings Institution*. .
- Hill, Richard C. and Cynthia Negrey. 1987. "Deindustrialization in the Great Lakes." *Urban Affairs Review* 22(4): 580 – 597.
- Holling, C. S., Gunderson, Lance H. and Peterson, G. D. 2002. "Sustainability and Panarchies," In L. H. Gunderson and C. S. Holling (Eds.) *Panarchy: Understanding Transformations in Human and Natural Systems* (Washington, DC: Island Press) 63 – 102.
- Hudnut, William H. 1995. *The Hudnut Years in Indianapolis 1976 -1991* (Indianapolis: Indiana University Press).
- Ihlanfeldt, Keith and David Sjoquist. 1989. "The Impact of Job Decentralization on the Economic Welfare of Central City Blacks." *Journal of Urban Economics* 26(1): 110-130.
- Ihlanfeldt, Keith. 1994. "The Importance of the Central City to the Regional and National Economy: A Review of the Arguments and Empirical Evidence," *Policy Research Center, Georgia State University*.
- Imbroscio, David. 1998. "Reformulating Urban Regime Theory: The Division of Labor between State and Market Reconsidered." *Journal of Urban Affairs* 20(3): 233–248.

- Indergaard, Michael. 1998. "Beyond the Region: The Rise and Fall of Economic Regionalism in Downriver Detroit." *Urban Affairs Review* 34(2): 241--262.
- Ingrassia, Paul and Joseph B. White. 1995. *Comeback: The Fall and Rise of the American Automobile Industry* (New York: Simon and Schuster).
- Jacobs, Brian. 2000. *Strategy and Partnerships in Cities and Regions: Economic Development and Urban Regeneration in Pittsburgh, Birmingham and Rotterdam* (New York: St. Martin's Press).
- Jacobs, Gregory. 1998. *Getting Around Brown: Desegregation, Development, and the Columbus Public Schools* (Columbus, Ohio: Ohio State University Press).
- Jargowsky, Paul A. 1997. *Poverty and Place: Ghettos, Barrios, and the American City* (New York: Russell Sage Foundation).
- Jo, Hyung Je. 2002. "Regional Restructuring and Urban Regimes: A Comparison of the Pittsburgh and Detroit Metropolitan Areas" Office for the Study of Automotive Transportation University of Michigan Transportation Research Institute, UMTRI 2002-20.
- Jones, Bryan D. and Lynn W. Bachelor. 1993. *The Sustaining Hand: Community Leadership and Corporate Power* (Lawrence, KS: University Press of Kansas).
- Kahn, Matthew E. 1997. "The Silver Lining of Rust Belt Manufacturing Decline: Killing Off Pollution Externalities." Center for Economic Studies, Bureau of the Census. June, p. 1.
- Kaplan, Howard B., 1999. "Toward an Understanding of Resilience: A Critical Review of Definitions and Models," In Meyer D. Glantz and Jeannette L. Johnson (Eds.) *Resilience and Development: Positive Life Adaptations* (New York: Kluwer Academic/Plenum) 17-83.
- Killikenny, Sarah Hutchens. 1906. *The History of Pittsburgh: Its Rise and Progress* (Pittsburgh: B.C and Gordon Montgomery).
- Klepper, Steven. 2001. The Evolution of the U.S. Automobile Industry and Detroit as its Capital
 <http://www.druid.dk/uploads/tx_picturedb/dw2002-440.pdf >
Unpublished paper. 2001.

- Klier, Thomas and Daniel P. McMillen. 2005. "Clustering of Auto Supplier Plants in the U.S.: GMM Spatial Logit for Large Samples," Working Paper, Federal Reserve Bank of Chicago, WP 2005-18.
- Koistinen, David. 2000. "Dealing with Deindustrialization: Economics, Politics, and Policy During the Decline of the New England Textile Industry, 1920-1960." *Unpublished dissertation*. Yale University.
- Kossy, Judith. 1996. "Economic Restructuring and the Restructuring of Economic Development Practice: A New York Perspective, 1985-1995." *Economic Development Quarterly* 10(4): 300-314.
- Kraushaar, Robert and David Perry. 1990. "Buffalo, New York: Region of No Illusions" In Richard D. Bingham and [Randall W. Eberts](#) (Eds.) *Economic Restructuring of the American Midwest: Proceedings of the Midwest Economic Restructuring Conference of the Federal Reserve Bank of Cleveland* (New York: Springer-Verlag).
- Krumholz, Norman and John Forester. 1990. *Making Equity Planning Work* (Philadelphia: Temple University Press).
- Kutscher, Ronald E. and Valerie A. Personick. 1986. "Deindustrialization and the Shift to Services." *Monthly Labor Review* June: 3 – 13.
- Lawrence, Robert Z. 1982. "Deindustrialization and U.S. International Competitiveness: Domestic and International Forces in U.S. Industrial Performance, 1970-1980," The Brookings Institution: Washington, DC.
- Lee, Cheol-Sung. 2005. *International Migration, Deindustrialization and Union Decline in 16 Affluent OECD countries, 1962-1997*. (Chapel Hill: University of North Carolina Press).
- Lewis-Colman, David. 2008. *Race Against Liberalism: Black Workers and the UAW in Detroit* (Chicago :University of Illinois Press).
- Logan, John R. and Harvey L. Molotch. 1987. *Urban Fortunes: The Political Economy of Place* (Berkeley, CA: The University of California Press)
- Lord, George F. and Albert C. Price. 1992. "Growth Ideology in a Period of Decline: Deindustrialization and Restructuring, Flint Style." *Social Problems* 39(2): 155 – 169.
- Lorence, James J. 1996. *Organizing the Unemployed: Community and Union Activists in the Industrial Heartland*. (New York: SUNY Press).

- Luria, Dan & Russell, Jack. 1981. *Rational Reindustrialization: An Economic Development Agenda for Detroit* (Detroit: Widgetripper Press).
- Mackinnon, Danny, Andrew Cumbers, and Keith Chapman. 2002. "Learning, Innovation and Regional Development: A Critical Appraisal of Recent Debates." *Progress in Human Geography* 26(3): 293 – 311.
- Magaziner, Ira and Robert Reich. 1983. *Minding America's Business: The Decline and Rise of the American Economy* (New York: Harcourt Brace).
- Markusen, Ann. 1989. "Industrial Restructuring and Regional Politics." in R. Beauregard (Ed.) *Economic Restructuring and Political Response* (Newbury Park, CA: Sage).
- Markusen, Ann. 1996. "Sticky Places in Slippery Space: A Typology of Industrial Districts." *Economic Geography* 72(3): 293 - 313.
- Markusen, Ann. 1999. "Fuzzy Concepts, Scanty Evidence, Policy Distance: The Case for Rigour and Policy Relevance in Critical Regional Studies." *Regional Studies* 33(9): 701–717.
- Markusen, Ann and Virginia Carlson. 1988. "Bowing Out, Bidding Down, and Betting on the Basics: Midwestern Responses to Deindustrialization in the 1980s." *Center for Urban Affairs and Policy Research, Working Paper*, Northeastern University, Boston, MA.
- Mayer, Henry J. and Michael R. Greenberg. 2001. "Coming Back from Economic Despair: Case Studies of Small- and Medium-Size American Cities." *Economic Development Quarterly* 15(3): 203 – 216.
- McCall, Leslie. 2001. *Complex Inequality : Gender, Class, and Race in the New Economy* (New York: Routledge).
- McCarthy, John. 2002. "Entertainment-Led Regeneration: The Case of Detroit." *Cities* 19(2):105-11.
- McGovern, Stephen J. 1998. *The Politics of Downtown Development* (Lexington: University of Kentucky Press).
- Minchin, Timothy. 2009. "It Knocked This City to its Knees': The Closure of Pillowtex Mills in Kannapolis, North Carolina and the Decline of the US Textile Industry." *Labor History* 50(3): 287 – 311.

- Mollenkopf, John. 1983. *The Contested City* (Princeton, NJ: Princeton University Press).
- Molotch, Harvey. 1988. "Strategies and Constraints of Growth Elites." In Scott Cummings (Ed.) *Business Elites and Urban Development* (Albany, NY: State University of New York Press) 25 – 48.
- National Bureau of Economic Research. 2009. Business Cycle Expansions and Contractions. < <http://www.nber.org/cycles.html> >
- Orfield, Myron. 1997. *Metropolitics: A Regional Agenda for Community and Stability* (Washington, DC: Brookings Institution Press).
- Orfield, Myron. 2002. *American Metropolitics: The New Suburban Reality* (Washington, DC: Brookings Institution Press).
- Pastor, Manuel, Chris Brenner, and Martha Matsuoka. 2009. *This Could be the Start of Something Big: How Social Movements for Regional Equity are Reshaping Metropolitan America* (Ithaca, NY: Cornell University Press).
- Pelisserro, John P. and David Fassenfest. 1989. "A Typology of Suburban Economic Development Policy Orientations." *Economic Development Quarterly* 3(4): 301 – 311.
- Pendall, Rolf, Kathryn Foster and Margaret Cowell. 2010. "Resilience and Regions: Building Understanding of the Metaphor." *Cambridge Journal of Regions, Economy and Society* 3(1): 71 – 84.
- Perry, David. 1990. "Recasting Urban Leadership in Buffalo" In Dennis Judd and Michael Parkinson (Eds.) *Leadership and Urban Regeneration: Cities in North American and Europe* (London: Sage).
- Pickett, Steward.T.A., Mary Cadenasso and Morgan Grove. 2004. "Resilient Cities: Meaning, Models, and Metaphor for Integrating the Ecological, Socio-economic, and Planning Realms." *Landscape and Urban Planning* 69: 369–384.
- Pieper, Ute. 1999. 'Deindustrialization and the Social and Economic Sustainability Nexus in Developing Countries: Cross-Country Evidence on Productivity and Employment', Working Paper No. 10, *Center for Economic Policy Analysis*, New School University.
- Pike, Andy, Andres Rodrigues-Pose, and John Tomaney. 2007. *Local and Regional Development* (New York: Routledge).

- Porter, Michael. 1998. "Clusters and the New Economics of Competition." *Harvard Business Review* 76:77-90.
- Porter, Michael. 2003. "The Economic Performance of Regions." *Regional Studies* 37(6-7): 549-578.
- Pressman, Jeffrey and Aaron Wildavsky. 1984. *Implementation: How Great Expectations in Washington are Dashed in Oakland* (Berkeley: University of California Press).
- Puffert, Douglas J. 2002. "Path Dependence in Spatial Networks: The Standardization of Railway Track Gauge." *Explorations in Economic History* 39: 282 - 314.
- Putnam, Robert D. 1977. "Elite Transformation in Advance Industrial Societies: An Empirical Assessment of the Theory of Technocracy". *Comparative Political Studies* 10 (3): 383 - 411.
- Putnam, Robert D. 1993. *Making Democracy Work: Civic Traditions in Modern Italy* (Princeton, NJ: Princeton University Press).
- Putnam, Robert D. 2001. "Community-Based Social Capital and Educational Performance" In D. Ravitch and J.P. Viteritti (Eds.) *Making Good Citizens: Education and Civil Society* (New Haven: Yale University Press).
- Rand Corporation. 1982. "The Cleveland Metropolitan Economy: An Initial Assessment." Aaron Gurwitz and G.Thomas Kingsley (Eds.).
- Rast, Joel. 2009. "Critical Junctures, Long-Term Processes: Urban Redevelopment in Chicago and Milwaukee, 1945-1980." *Social Science History* 33(4): 393 – 426.
- Reese, Laura A. 2006. "Economic Versus Natural Disasters: If Detroit Had a Hurricane..." *Economic Development Quarterly* 20(3): 219-231.
- Reese, Laura. 2006b. "Do We Really Need Another Typology? Clusters of Local Economic Development Strategies" *Economic Development Quarterly* 20(4): 368 – 376.
- Revenge, Ana L. 1992. "Exporting Jobs?: The Impact of Import Competition on Employment and Wages in U.S. Manufacturing." *The Quarterly Journal of Economics* 107(1): 255-284

- Ricardo, David. 1821. *On the Principles of Political Economy and Taxation*. (London: John Murray).
- Rich, Wilbur C. 1989. *Coleman Young and Detroit Politics: From Social Activist to Power Broker* (Detroit: Wayne State University Press).
- Rodriguez-Pose, Andres and John Tomaney. 1999. "Industrial Crisis in the Centre of the Periphery: Stabilisation, Economic Restructuring and Policy Responses in the Sao Paulo Metropolitan Region." *Urban Studies* 36(3): 479 – 498.
- Rose, Adam. 2004. "Defining and Measuring Economic Resilience to Disasters." *Disaster Prevention and Management* 13: 307-314.
- Rowthorn, Robert and Ramana Ramaswamy. 1997. "Deindustrialization: Causes and Implications" In International Monetary Fund (Ed.) *Staff Studies for the World Economic Outlook* (Washington, DC: IMF) 61- 77.
- Rusk, David. 1993. *Cities Without Suburbs* (Washington DC, Woodrow Wilson Center Press).
- Rusk, David. 1999. *Inside Game Outside Game: Winning Strategies for Saving Urban America* (Washington DC: Brookings Institution Press).
- Safford, Sean. 2004. "Why the Garden Club Couldn't Save Youngstown: Social Embeddedness and the Transformation of the Rust Belt." *Unpublished dissertation*. MIT, Sloan School of Management.
- Sassen, Saskia. 1990(a). "Economic Restructuring and the American City." *Annual Review of Sociology* 16: 465 – 490.
- Sassen, Saskia. 1990(b). *The Mobility of Labor and Capital: A Study in International Investment and Labor Flow* (Cambridge: Cambridge University Press).
- Saxenian, Annalee. 1994. *Regional Advantage: Culture and Competition in Silicon Valley and Route 128* (Cambridge, MA: Harvard University Press).
- Sbragia, Alberta. 1990. "Pittsburgh's 'Third Way': The Nonprofit Sector as a Key to Urban Regeneration" In Dennis Judd and Michael Parkinson (Eds.) *Leadership and Urban Regeneration: Cities in North American and Europe* (London: Sage).

- Schoenberger, Erica. 1987. "Technological and Organizational Change in Automobile Production: Spatial Implications." *Regional Studies* 21(3): 199 – 214.
- Schumpeter, Joseph. 1982. *The Theory of Economic Development* (Cambridge, MA: Harvard University Press).
- SEMCOG. 2002. "Historical Population and Employment by Minor Civil Division, Southeast Michigan Population, 1900-2000, Employment, 1970-2000."
- Singleton, Christopher J. 1992. "Auto Industry Jobs in the 1980s: A Decade of Transition." *Monthly Labor Review* Sept. 18-27.
- Skocpol, Theda, 1996. "Unraveling from above" *The American Prospect* 25 (Mar/Apr): 20-25.
- Smith, Neil. 1984. "Deindustrialization and Regionalization: Class Alliance and Class Struggle." *Papers of the Regional Science Association* 54: 113 – 128.
- Sternberg, Ernest. 1987. "A Practitioner's Classification of Economic Development Policy Instruments, with Some Inspiration from Political Economy." *Economic Development Quarterly* 1(2): 149 – 161.
- Stiglitz, Joseph E. 2002. "Participation and Development: Perspectives from the Comprehensive Development Paradigm." *Review of Development Economics* 6(2): 163 -182.
- Stoker, Gerry. 1998. "Public-Private Partnerships and Urban Governance" In Jon Pierre (Ed.) *Partnerships in Urban Governance: European and American Experience* (London: MacMillan) 34-51.
- Stone, Clarence. 1989. *Regime Politics: Governing Atlanta, 1946–1988* (Lawrence, KS: University Press of Kansas).
- Storper, Michael. 1995. "The Resurgence of Regional Economies, Ten Years Later: The Region as a Nexus of Untraded Interdependencies." *European Urban and Regional Studies* 2(3): 191-221.
- Stradling, David. 2003. *Cincinnati, Ohio: From River City to Highway Metropolis* (Chicago: Arcadia).

- Strange Ian. 1997. "Directing the Show? Business Leaders, Local Partnership, and Economic Regeneration in Sheffield." *Environment and Planning C: Government and Policy* 15(1): 1 – 17.
- Sugrue, Thomas. 2005. *The Origins of the Urban Crisis: Race and Inequality in Postwar Detroit* (Princeton, New Jersey: Princeton University Press).
- Swindell, David W., Mark S. Rosentraub, Daniel R. Mullins, and Michael Przybylski. "The Amateur Sports Strategy" In William Hudnit (Ed.) *The Hudnut Years in Indianapolis: 1976 – 1991* (Bloomington, IN: Indiana University Press).
- Thomas, June Manning. 1990. "Planning and Industrial Decline: Lessons from Postwar Detroit." *Journal of the American Planning Association* 56(3): 297-310.
- Thompson, Heather Ann. 2001. *Whose Detroit? Politics, Labor, and Race in a Modern City* (Ithaca: Cornell).
- Thurow, Lester. 1980. *The Zero-Sum Society* (New York: Basic Books).
- Tiebout, Charles. 1956. "A Pure Theory of Local Expenditures." *The Journal of Political Economy* 64: 416-24.
- U.S. Census. 1970. Census of Population and Housing. Series P2 (PC(P2)-32).
<http://www2.census.gov/prod2/decennial/documents/026655922.pdf>
- U.S. Census. 1980. Census of Population and Housing. Series 2 (PHC80-2-106).
<http://www2.census.gov/prod2/decennial/documents/1980/tracts-cities/CensusTracts1980-BuffaloNY.pdf>
- U.S. Census. 2007. Table 1: Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico.
- U.S. Congress. House. 1988. Economic Development Programs in the Chicago, IL, Area: Hearing before the Subcommittee on Economic Development of the Committee on Public Works and Transportation. 100th Congress, 2nd session, 19 February. Washington, D.C.: GPO, 1988.
- Vale, Lawrence J. and Thomas H. Campanella, eds. 2005. *The Resilient City: How Modern Cities Recover from Disaster* (New York: Oxford University Press).

- Varaiya, Pravin and Michael Wiseman. 1981. "Investment and Employment in Manufacturing in U.S. Metropolitan Areas 1960–1976." *Regional Science and Urban Economics* 11(4): 431- 469.
- Voith, Richard P. 1996. "Central City Decline: Regional or Neighborhood Solutions?" *Federal Reserve Bank of Philadelphia Business Review* (March/April).
- Ward, Kevin, and Andrew Jonas. 2004. "Competitive City-Regionalism as a Politics of Space: A Critical Reinterpretation of the New Regionalism" *Environment and Planning A* 36: 2119 – 2139.
- Weiss, Marc A. and John T. Metzger. 1989. "Planning for Chicago: The Changing Politics of Metropolitan Growth and Neighborhood Development." In Robert A. Beauregard (Ed.) *Atop the Urban Hierarchy* (Totowa, New Jersey: Rowman and Littlefield) p123-152.
- Wilson, William Julius. 1996. *When Work Disappears: The World of the New Urban Poor* (New York, NY: Alfred A. Knopf, Inc).
- Wood Henrickson, Wilma. 1991. *Detroit Perspectives: Crossroads and Turning Points* (Detroit: Wayne State University Press).
- Wong, Cecelia. 2001. "The Relationship between Quality of Life and Local Economic Development: An Empirical Study of Local Authority Areas in England." *Cities* 18(1): 25 -32.
- Wood Henrickson, Wilma. 1991. *Detroit Perspectives: Crossroads and Turning Points* (Detroit: Wayne State University Press).
- Wylie, Jeanie. 1990. *Poletown: Community Betrayed* (Chicago: University of Illinois Press).
- Yago, Glenn, Hyman Korman, Sen-Yuan Wu, and Michale Schwartz. 1984. "Investment and Disinvestment in New York, 1960 – 1980." *Annals of the American Academy of Political and Social Science*, 475(1): 28-38.
- Yin, Robert K. 1994. *Case Study Research: Design and Methods* (Thousand Oaks: Sage).