Cultural Policy and Economic Development: Empirical and Political Complexities of Relating Arts to Growth in Cities

by

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INTRODUCTION

My interest in the economic impact of the arts in cities stems from my experiences abroad with the International Honors Program, *Cities in the 21st Century.* The program began in Detroit and then moved on to explore Chandigarh and Delhi in India, and Cape Town, South Africa. Via observation, interview, research, and analysis, I gained an understanding of how artists and arts organizations fit into the larger economic and historical contexts of these cities. In each city, I was struck by how arts and culture are woven into urban forms, identities, and economies.

My research abroad focused primarily on how marginalized communities employed the arts as a means of contesting the status quo, generating a sense of community, and becoming economically self-sufficient. In Detroit, I observed how arts and culture are used to cope with the devolution of the urban environment and economy. A particularly notable, and controversial, artistic installation we visited was the Heidelberg Project. The Heidelberg Project was started by Tyree Guyton and his family in 1986, during a time when Detroit was experiencing the repercussions of race rioting, abandonment, and white flight. As homes emptied, Tyree and others began to transform the vacant properties into gigantic art installations as part of a political protest against deteriorating conditions and increased crime (Kinloch, 2005).
The homes are covered in toys, stuffed animals, graffiti, clothing, signs, and furniture. Twice the city has attempted to demolish the project on the grounds that it disrupts urban planning. However, Tyree and supporters brought a law-suit against the city in 1999 as preparations were made for a second demolition. In the end, "the Wayne County Circuit Court ruled that the Heidelberg Project was protected ‘political speech’ under the 1st Amendment as an outdoor art environment" (Amazing Data, 2009, Aug 2). Since winning the court case, the Heidelberg Project has grown and thrived and has now become an influential art installation with international recognition. The project receives over 275,000 visitors annually. During our visit, artists working on the project described how crime had decreased exponentially in the neighborhood, and residents took pride in the art and its political message.

When visiting Chandigarh, a city north of Delhi, my class encountered other forms of protest art. Chandigarh is India's first planned city, designed in the 1950s by world renowned Swiss architect; Le Corbusier. Our lecturer SD Sharma explained how the city was supposed to represent harmony, democracy, and the resurgence of India after independence in 1947. Based on Garden City principles, Chandigarh contains vast swaths of green space, gridded roads for efficient transportation, and small parks dispersed throughout neighborhoods. Open spaces near administrative buildings were intended to encourage public gathering, debate, and democracy (Sharma, personal communication 2009, Sept 2).

Nevertheless, not everyone feels that Chandigarh is an open democratic city encouraging freedom of expression. The Rock Garden in Chandigarh is an example of artwork that challenges the status quo. Nek Chand is the engineer of the garden,
which he began secretly building in the 1950s while working as a roads inspector. As Chandigarh was being constructed, Nek Chand collected waste materials and began building a series of interlinking courtyards filled with statues and fountains. Nek Chand's work was highly illegal as it was built in the middle of a land conservancy that was off-limits to construction under Le Corbusier's plan. However, Nek Chand managed to keep his project safe for 18 years. When finally discovered, the government called for the garden's demolition. However, Nek Chand was able to recruit public support and save the project. Today, the garden has grown to be over 25 acres and is visited by five thousand people daily. Over twelve million people have visited the garden since it opened to the public (Nek Chand Foundation, 2002).

Nek Chand's garden represents an attempt to challenge and transform an imposed vision of the perfect city. Physically, the winding pathways of the Rock Garden juxtapose sharply with the straight planned streets of Chandigarh. Our speaker, Anu Sabhlok, spoke of the garden as a "defiance of the grid," Le Corbusier's symbol of access, efficiency, and freedom. Chand's garden literally puts an Indian twist on Corbusian principles, developing an alternative utopia with a completely different aesthetic.

In South Africa, we encountered protest art in the form of theatre, music, and dance. In an interview with Asanda Phewa (2009, Oct 22)—the stage manager for a play titled Partly God—Ms. Phewa described how her play represented a protest against the legacy of violence that the system of Apartheid had left in its wake. Although the Apartheid officially ended in 1993, the landscape of Cape Town remains highly segregated with whites located in highly policed areas near the central
business district and blacks strewn out across the desolate cape flats in scattered townships with few public services. A conversation with two police officers revealed that the police rarely, if ever, enter the cape flats. Our country coordinators and home-stay hosts described how, due to the lack of surveillance, gangs are often driven to police their own neighborhoods.

Ms. Phewa described how “today, there is a silence surrounding acts of violence.” She argued that acts of violence are perpetuated because people do not know how to talk about their experiences with violence, so they act them out on others. Theatre, according to Ms. Phewa, “is about bringing violence out of silence and creating a platform for dialogue and discussion.” Ms. Phewa and her theatre group hope to use the arts to acknowledge violence, and generate dialogue to help their communities move forward in a non-violent manner. Like in the other countries, art is used to contest the status quo of urban forms and systems, and present creative alternatives.

While much of my research focused on understanding the arts as a tool of protest by marginalized communities, I was also fascinated by the economic potential of the arts. While visiting Detroit, we were able to attend the 30th annual International Jazz Festival, a three day event that drew over 750,000 people to the city. The festival is renowned as one of the largest jazz events in the world, and is a huge boon to the city, bringing in approximately $90 million annually to the local government (JazzStage Productions, 2009). While other industries have disappeared from the city, the long-standing music industry continues to draw in revenue.
In Delhi, India, my most immediate encounter with arts was as a tourist. Walking around the city, I was constantly offered carved elephants, hand-made jewelry, photographs and paintings of monuments, and countless other trinkets and souvenirs. I had my hands decorated in henna by a man who had set up a makeshift shop on the side of the street, consisting of two chairs and a table. At another street corner near my house, I passed a provisional shop where a man was creating beautiful life-size mud-sculptures of Hindu gods for the upcoming Durga Puja festival. Clearly, artistic creations form a sort of commerce in the bustling city. The industry is powerful enough that it has successfully colonized different sectors of the city in the form of handicrafts markets. Dilli Haat is the most famous and exclusive crafts market, demanding an entrance fee of fifteen Rupees (35 cents) per person. Inside the market are handicrafts from all over India; leather wallets, intricate animals carved from stone, sari’s, footwear, delicate paintings of fish gods, and countless home decorations. Markets like Dilli Haat are huge tourist destinations. Protected from bustling crowds and nagging street vendors, many foreigners prefer these quieter more regulated shopping environments.

In South Africa, one particular example highlights the economic potential of the arts, culture, and creativity. On a tour of one of the most remote and struggling townships—Khayelitsha—my group was brought to a small shack where a man named Golden was making flowers out of discarded soda cans. Incredibly, in Khayelitsha where the unemployment rate is 66 percent, Golden has managed to carve out a small business selling recycled garbage in the form of flowers. He has expanded his business to sell his flowers at the Waterfront in the central business
district where he can have greater access to the flow of tourists. Golden’s business and the story behind it are written up on Cape Town’s website in an effort to advertise the city and to increase the circulation of tourists (Bray, 2008). Golden’s story, along with my observations in other cities, inspired this thesis in which I investigate the relationship between cities, culture and the arts, and economics.

In addition to my observations abroad, two distinctive phenomena of 21st century cities inspired this thesis. The first is the rising importance of cities as anchors in an increasingly globalized economy. The second is the increased importance of arts and culture as an economic asset. Over the past few decades, major shifts in systems of production and consumption have led to the emerging importance both of cities and cultural exchange in the global economy. The changing nature of economics is in large part due to advanced technologies that allow for the rapid transmission of goods and services throughout the world.

With regards to cities, sociologist Saskia Sassen notes that, originally, experts and policy makers were convinced that emerging information and communications technologies would make cities obsolete: as goods and services became hyper-mobile and electronically transmittable, the importance of geography and centrality would decline (Sassen, 2000, p. 269). In practice, however, Sassen observes that cities are vitally important to service-producing firms who rely on non-expert jobs, infrastructure, and facilities. As such, firms are dependent on a “vast structure of work that is far less mobile, and indeed, requires the massive concentrations of human and telecommunication resources we find in major cities” (p. 270). Instead of
becoming obsolete, cities have increasingly become hubs or nodes of economic activity. As Sassen observes, “the global economy materializes in a worldwide grid of strategic places…we can think of this grid as consisting of a new economic geography of centrality, one that cuts across national boundaries” (p. 270). The increased economic importance of cities is reflected in their vast growth and expansion. Since 2008, for the first time in history, over half of the world's population resides in cities (Population Reference Bureau, 2011). As cities increasingly become pivotal centers in national and global economies, there has been a surge of demand for research examining effective urban economic policy.

While shifts in the global economy have led to the emerging importance of cities, the changing nature of products and goods has also led to changes in what is being consumed. Sociologist Sharon Zukin refers to the contemporary economy as a "symbolic economy,” noting that economic activity is steadily concentrating around the production of goods with aesthetic or semiotic characteristics (Zukin, 1995, p. 3). Consumers in the new economy are more interested in experiences or products with abstract value. As such, cultural experiences or goods have become increasingly important.

The result is a marriage between the economic significance of cities and the economic significance of culture. Increasingly, cultural policy has become interwoven with economic development policy. Zukin argues that "culture is more and more the business of cities—the basis of their tourist attractions and their unique, competitive edge" (p. 2). No longer is culture considered a bi-product of a wealthy
economy; instead, it is often perceived as the driver of the economy itself. Beatriz Garcia summarizes this paradigm shift:

In this sense, a key realization during the last decades of the 20th Century was that, although cities have always had cultural functions, the evolution of a global, service-oriented economy has placed culture at the very center of urban development, and has shifted traditional notions of culture as art and heritage to a view of culture as an economic asset, a commodity with market value and, as such, a valuable producer of marketable city spaces (Garcia, 2004, p. 313).

Economist David Throsby (2010) describes how the meaning of culture has transformed and broadened throughout the past few decades, allowing cultural policy to more easily permeate into larger economic development schemes. Throsby describes how “there has been an expansion in the scope of the term ‘culture’…from a concern only with arts and heritage to a broader interpretation of culture as a way of life” (p. 2). As the distinction between high culture and popular culture has eroded, Throsby describes how “the range of cultural activities of interest to policy has widened” (p.2). More and more, policy makers have been able to imagine and legitimate the marriage between cultural policy and economic development policy.

As culture has increasingly become recognized as an economic asset, David Throsby describes the remarkable changes that have occurred in the field of cultural policy over the past few decades. In his review of a series of UNESCO reports regarding cultural policy in the 1970s, Throsby observes that “the 1970s cultural policy statements contained few if any references to the economics of culture…Now, in the opening years of the new millennium, economics is everywhere” (Throsby, 2010, p. 2). In what ways are culture and the arts deemed to be economically vital to cities? In reviewing the literature, three interrelated agendas emerge: culture is valued for its potential capacity to (a) attract domestic and international tourists to
cities, (b) attract and retain creative, high human-capital individuals as well as firms seeking a skilled labor pool, and (c) seed the development of ‘creative economies’ by catalyzing innovation in other industries, especially high-tech industries. Placing culture and the arts in the framework of economic development theory allows for new tools to be employed to legitimize funding for this sector. Throsby describes how, traditionally, policy makers were reluctant to invest in the arts: they worried that arts funding simply served “an articulate and self-serving arts lobby” with few public benefits (p. 7). Nevertheless, viewing culture through the lens of economic development helps to “legitimize culture in the eyes of hard-headed economic policy-makers…Now the arts can be seen as part of a wider and more dynamic sphere of economic activity, with links through information and knowledge economies, fostering creativity, embracing new technologies and feeding innovation” (p. 7).

Intrigued by the power of economics to legitimize and strengthen the case for the arts, I was curious to see exactly how new econometric tools could be implemented to support and study cultural policy. I became interested in understanding how the economic value of culture and the arts is captured and quantified, specifically in relation to the three agendas mentioned above. What evidence is there that culture is important for tourism, attracting talented people and firms, and generating a creative economy by spurring innovation? I was eager to become involved in using econometric analysis to make a case for the arts by generating statistical support for these three agendas.

One highly relevant study regarding this topic is a 2005 report by Americans for the Arts (AFTA) titled *Arts and Economic Prosperity III*. AFTA describes itself as
“the nation’s leading non-profit organization for advancing the arts in America” (Americans for the Arts, 2009). Recognizing the importance of econometric analysis for advancing a policy-case for the arts, AFTA produced the 2005 report, described as “the most comprehensive study of the nonprofit arts and culture industry ever conducted” (Cohen, Schaffer, & Davidson, 2003, p. 30). By examining the nonprofit arts and culture industry in more than 150 communities and regions (including 116 cities and counties), the study assesses the economic impact of this industry on a regional and national scale. The study finds that, “Nationally, we estimate that America's nonprofit arts industry generates $134 billion in economic activity every year” (p. 30). In addition, the study finds that “the spending by both arts organizations and their audiences supported a total of 9,956 FTE [full-time equivalent] jobs and generated $213.5 million in resident household income, $17.2 million in local government revenue, and $24.9 million in state government revenue” (p. 23). These findings are impressive and highlight the arts industry as a significant contributor to the economy, drawing the attention of city planners and governors.

With regards to the different policy agendas, the AFTA study provides substantial supportive evidence for the proposal that arts and culture are important economically in terms of tourism. The study finds that, on average, non-local attendees to arts events spend twice as much as local attendees. In addition to paying for the cost of admissions, non-local attendees tend to spend more on meals, gifts and souvenirs, lodging, child care, and transportation (Cohen, et al., 2003, p. 20). Combined with the finding that “tourism in the global scenario makes up 11 percent of GDP,” there appears to be substantial evidence that cultural tourism is becoming
increasingly important to local and regional economies (Economy Watch, 2011).

While statistics show that culture is highly intertwined with the economics of tourism, AFTA also makes statements that support the latter two agendas mentioned above, as evidenced by the following claims found in their Summary Report (Robert L. Lynch, 2005a):

- Having an abundance of unique arts and events means more revenue for local businesses and makes our communities more attractive to young, talented professionals—whose decisions on where to start a career or business are increasingly driven by quality of life and the availability of cultural amenities (13).
- Right now, cities around the world are competing to attract new businesses as well as our brightest young professionals. International studies show that the winners will be communities that offer an abundance of arts and culture opportunities. As the arts flourish, so will creativity and innovation—the fuel that drives our global economy (3).

Although these statements are included in the report, neither of them is supported by actual numbers or statistics from the study. Curious to see if the report could provide empirical support for these claims, I decided to construct a model where I would explore the association between investment in the arts, in-migration of human capital, and indicators of economic growth. Nevertheless, I found significant holes in the data that prevented me from carrying out this analysis. The AFTA report lacks the necessary data to support these claims, such as time-series data, data tracking the migration of young-professionals, or data comparing the economic vitality of cities over time and whether or not there is an association between economic growth and cultural amenities.

Turning away from the AFTA report, I next encountered the work of Richard Florida in his book entitled The Rise of the Creative Class. The content of Florida’s book revolves entirely around supporting the latter two agendas mentioned above: (1)
that culture helps to attract and retain creative, high human-capital individuals as well as firms seeking a skilled labor pool, and (2) that culture helps to seed the development of ‘creative economies’ by catalyzing innovation in other industries, especially high-tech industries (Florida, 2002a).

Florida epitomizes the movement to recast culture and creativity in economic terms, accentuating their relationship to urban growth. Citing transitions in the global economy, Florida argues that creativity is the new driver of urban growth: in the emergent knowledge economy, natural resources have become obsolete as ideas and innovations are becoming the new source of wealth creation (p. xix). Given that creative people are the generators of new ideas, Florida argues that this population—broadly classified as the Creative Class—has become the newest most valuable resource. Florida asserts that members of the Creative Class collect in places that meet their lifestyle needs, and that agglomerations of these individuals catalyze start-ups or attract firms seeking a skilled labor force. Consequently, the key to urban economic growth lays not in the traditional methods of providing incentives for firms to locate in a particular region. Instead, cities must cater to the needs and desires of the Creative Class. As such, cities must determine exactly what those needs and desires are. Through a combination of empirical and qualitative research, Florida claims to have found the answer: according to his creative capital theory, “regional economic growth is powered by creative people, who prefer places that are diverse, tolerant, and open to new ideas” (p. 249). Most significantly, he argues that agglomerations of artists or ‘bohemians’ indicate the type of environmental milieu that attracts talented individuals (Florida, 2002b, p. 55). By developing certain types
of cultural and artistic amenities, Florida argues that cities can help to spur economic growth. Florida develops a Bohemian Index to test his theories empirically, and finds many correlations between this index and indicators of economic development.

Initially, Florida’s studies struck me as a jack-pot—a holy grail of firm empirical research coupled with qualitative descriptions. Nevertheless, upon closer examination, I found Florida’s theories to be far from straightforward. This thesis concentrates on attempting to unravel Florida’s theories, both empirically and qualitatively. Chapter 1 consists of a literature review in which I describe Florida’s theories in more depth and analyze both the supporting and critical literature. Chapter 2 is an empirical investigation into Florida’s theories. Here I build my own empirical model to test Florida’s theories, developing alternative indexes against which to test his model of economic growth. Finally, Chapter 3 delves into the case-studies of Austin and Orlando. As the prototype for the Creative Class theory, Austin is the ideal site for studying Florida’s economic development model. In turn, Orlando struck my interest because of its high ranking on the Bohemian Index and various measures of urban growth, such as its number one ranking in terms of GDP growth. As such, a simple glance at these cities lends support for Florida’s theories about the relationship between Bohemians and urban growth. Nevertheless, more in-depth investigations of how these cities evolved economically complicate Florida’s theories. The case-studies raise questions about the practicality and sustainability of Florida’s theories, as well as highlighting political and ethical problems associated with his work.
Throughout my investigation, I have become increasingly aware of the complexities and contradictions embedded in Florida’s theories. While this thesis questions Florida’s theories, research, and practices, it simultaneously recognizes the significance of attempting to quantify the value of the arts. Throughout the study, I suggest how econometric models can be improved to further explore the relationship between arts and urban growth. At the same time, I use case-studies to highlight the limitations and pitfalls of current empirical analysis. In conclusion, I argue that developing an econometric model relating arts to urban growth is a highly political endeavor that can easily be appropriated for specific interests. In sum, linking cultural policy to economic development models is a delicate art in itself, and one that must be constantly reworked and revised in order to best serve the urban community.
CHAPTER 1: Literature Review

I. Richard Florida’s Influence

Florida’s Creative Class theories have become immensely popular domestically and internationally, sparking interest and debate among scholars, policy-makers, and civic leaders. His book *Rise of the Creative Class* has become a best-seller, and received praise from respected institutes like the *Harvard Business Review* and *Washington Monthly*. A subsequent publishing, *Who’s Your City*, is both a national and international bestseller, and was an amazon.com Book of the Month. In his review of *Rise of the Creative Class*, Harvard economics professor Edward Glaeser says “there is little question that Florida’s book has become the most popular book on regional economies over the past decade” (Edward L. Glaeser, 2005, p. 593). Florida has become an extremely popular speaker worldwide. Cities competing for his addresses frequently pay speaking fees well into the five-figure range (Peck, 2005, p. 740).

Florida’s theories have had a particularly large impact on cities’ renewed interest in arts and cultural policies. Many mayors, senators, and public officials echo Florida’s theories when discussing economic development strategies. For example, Massachusetts Senator Edward Kennedy stated that “Cities and towns with
flourishing cultural activities attract business and tourists…” (Robert L. Lynch, 2005a, p. 16). Even towns as small and remote as Homer, Alaska (population around 5000) specifically cite Florida’s thesis. Under a section titled *Arts and the Creative Class*, Homer’s 2011 Comprehensive Economic Development Strategy states that “the arts help create the type of environment that in turn attracts other creative people, including those in the highly desirable, knowledge-based ‘new economy’ industries” (Erickson, 2010). Homer then lists several arts improvement and investment strategies aimed at boosting the city’s small arts-town image.

Encouraged by Florida’s theories, other cities and towns have similarly implemented arts improvement projects as part of a larger economic development strategy aimed at attracting the Creative Class. The critical urban theorist and geographer Jamie Peck observes how “the Governor of Michigan was so profoundly taken by Florida’s arguments that she… launch[ed] a ‘Cool Cities’ program across the state” (Peck, 2005, p.742). The following mission statement reflects Florida’s theories:

The mission of the Cool Cities Initiative is to revitalize Michigan’s neighborhoods and communities by applying the new economy paradigm where creative place making and talent matter…To survive and thrive in the future, Michigan’s cities must retain and attract more people including urban pioneers and young knowledge workers to its cities. We want them to choose Michigan as the place they want to live, work, learn, and play by creating neighborhoods that are vibrant, diverse, green, and safe (Michigan State Housing Development Authority).

Peck summarizes the various investment projects undertaken in each of the cities, as listed under ‘project summaries’ on the Cool Cities webpage:

The City of Saugatuck proposed to convert a dilapidated pie factory into an arts center; Flint’s Uptown Reinvestment Corporation sought assistance in converting a historic bank building into a 16-unit loft development; turning a
parking lot into an ice-rink and performance space was the priority project for the City of Marquette; Detroit Jefferson East Business Association called on the State to subsidize desirable business clients — in the technology and entertainment sectors — for a mixed-use complex containing 28 lofts, a TV studio, an ice cream parlor, ‘an upscale bar, an art gallery . . . and a coffee shop that will double as a music production and education café’; a heritage river walk was the centerpiece of the proposal from the City of Alpena; Grand Rapids proposed streetscaping and public art installations around a 35-unit loft complex; the City of Ypsilanti sought help to make its historic downtown neighborhood ‘more intriguing’, ostensibly by turning a vacant office building into a retail gallery and overflow space for the nearby Riverside Arts Center…the Southwest Detroit Business Association sought subsidies for the renovation of a historic building to house a ‘Neighborhood that built the car’ cultural-tourism center (Peck, 2005, p. 752).

Peck describes these as examples of ‘hard-infrastructure’ projects, while noting that other cities invest in ‘softer strategies’ focused around events and social activities (Peck, 2005). These examples illustrate how seriously Florida’s theories are being taken. Florida’s influence has spread well beyond the U.S., and similar projects are being developed in Europe and Asia.

II. Defining the Creative Class

Florida defines the Creative Class as those who are paid primarily to think and create new forms. His definition captures a wide range of professionals, from artists to engineers to business managers. Florida’s definition of the Creative Class uses occupational data to define the class, instead of segregating classes according to wages earned or by industry. He uses the 1998 Standard Occupational Classification (SOC) System to define the class.

The Creative Class is broken down into two subcategories. The first is the Super-Creative Core, consisting of ‘people who work in science and engineering,
computers and mathematics, education, and the arts, design and entertainment, people who work in directly creative activity” (Florida, 2002a, p. 74). The second group consists of Creative Professionals which includes anyone working in knowledge-intensive industries, whether in high-tech, healthcare, law, or business management. According to Florida, the Creative Class as a whole has grown from approximately 3 million workers in 1990 to 38.3 million Americans in 2001. Florida’s Creative Class entails roughly 30 percent of the United States workforce, as of 2001 (p. 74). Richard Florida classifies the remainder of the workforce—with the exception of those that work in government—as the Working and Service Classes. The Working Class is roughly consistent with those employed in manufacturing. The Service workers are described as those in lower-paying and less autonomous service occupations in health-care, food preparation, personal care, etc.

Florida states that regions with higher proportions of the Creative Class will garner considerable economic advantage. He illustrates this point by running a series of correlations demonstrating that cities with high Creative Class rankings also score high in the following categories: (a) high-tech industry (Measure using the Milken Institute’s Tech-Pole Index) and (b) innovation (measured as patented innovations per capita) (p.332). Florida warns that regions are becoming increasingly more segregated, with some cities capturing greater shares of the Creative Class than others. He predicts that the United States is experiencing a new kind of spatial segregation; instead of intra-urban segregation by residential neighborhood, cities are beginning to experience inter-urban segregation as they compete for labor. Florida argues that the 2008 recession will speed up this re-distribution of the classes, and
that some regions may suffer irreparably from the crash causing them to be left behind, spiraling into decline (Florida, 2009). As the global economy becomes more and more high-tech and service oriented, older industrial cities are scrambling for new policies to fortify themselves against degradation.

Florida’s Creative Class growth paradigm emphasizes that cities should seek to attract creative workers. His studies suggest that cities that are “diverse, tolerant, and open to new ideas” will be most successful in this endeavor (Florida, 2002a, p. 223). How did Florida arrive at this conclusion, and what are his policy prescripts? The following section is a detailed description of the methods and measures used by Florida in his empirical analysis leading to his Creative Class theory. Such a detailed analysis is necessary in order to comprehend how Florida’s model is both novel and subject to criticism. In addition, it helps to explain motivations behind how I constructed my own models when testing Florida’s theories in Chapter 2.

III. Supporting the Creative Class Theory

In his book Rise of the Creative Class, Florida devotes a chapter to what he calls the Three T’s of Economic Development: Technology, Talent and Tolerance. He argues that “to attract creative people, generate innovation and stimulate economic growth, a place must have all three” (Florida, 2002a, p. 249). Thus, Florida hypothesizes that the three T’s are essentially the key to economic development in contemporary urban economics. In order to test this hypothesis, Florida creates indexes for each of the three T’s and compares how they interact with each other and
how they relate to measures of urban growth such as population growth and employment growth.

The technology and talent indexes Florida uses are straightforward. Technology, also labeled as the High-Tech Index or the tech-pole is a measure for the concentration of high-technology industry in a region, developed by the Milken Institute. According to Florida, the index is measured in the following way: “The High-Tech Index ranks metropolitan areas based on a combination of two factors: (1) its high-tech industrial output as a percentage of the U.S high-tech industrial output; and (2) the percentage of the region’s own total economic output that comes from high-tech industries compared to the nationwide percentage” (Florida, 2002a, p. 332).

The Talent Index is a simple measure of human capital in a region based on census data that quantifies a region’s share of the population with a bachelor’s degree or higher. What is unclear to me about the technology and talent indexes is where they fall in Florida’s causal model. Do they function primarily “to generate innovation and stimulate economic growth” or do they also “attract the creative class”—or are they involved in both? Like the chicken and egg question, what comes first; does previously established talent and technology attract the Creative Class, or is it the arrival of the Creative Class that catalyzes high-tech growth?

In contrast to the talent and technology indices, the Tolerance Index is clearly situated in Florida’s model as an attribute that attracts the Creative Class.

Nevertheless, while talent and technology are straightforward measures, the Tolerance Index is more difficult to comprehend. Note first that the Tolerance Index is synonymous with Florida’s Composite Diversity Index (CDI). The three main
components of the CDI that Florida generates are the Gay Index, the Melting Pot Index, and the Bohemian Index. The Gay Index—developed by Gary Gates—describes the relative concentration of gay people in a region compared to the national average. The Melting Pot Index measures the relative percentage of foreign born people in a region and is based on 1990 U.S Decennial Census Public Use Microdata Sample. Finally, the Bohemian Index is a measure of artistically creative people in a region: “It includes authors, designers, musicians, composers, actors, directors, painters, sculptors, artist printmakers, photographers, dancers, artists and performers” and is also based on 1990 U.S. Decennial Census Public Use Microdata Sample (Florida, 2002b, p. 59).

Florida combines these three indexes to create the Composite Diversity Index (CDI). He uses the following methodology: “The CDI adds together [these] three diversity measures. We ranked regions on each indicator and summed the rankings” (Florida, 2002a, p. 261). Florida argues that regions with a higher CDI will experience economic growth because they are attractive to the Creative Class: “regional economic growth is powered by creative people, who prefer places that are diverse, tolerant and open to new ideas” (p. 249). In order to support this claim, Florida selects the ten cities with the top high-tech rankings, and looks at where they fall on the CDI ranking. His results show that “five of the top ten regions on the CDI are also among the top ten high-tech regions: San Francisco, Boston, Seattle, Los Angeles, and Washington, DC” (p. 262). Florida claims that “The results again support the basic notion that diversity and creativity work together to power innovation and economic growth” (p. 262). Throughout the chapter, Florida
compares cities according to their rankings across different categories. If five or more cities rank in the top ten of two different categories, Florida uses this simple correlation as support for his theories about what attracts the creative class to a city.

Particularly important to this thesis is Florida’s use of the Bohemian Index. I find this index particularly intriguing because, out of all the CDI measures, it seems to have the most neutral and feasible policy implications, and it appears to have been the most influential. It is plausible that city governments can more easily find support and funding for the arts than for policies aimed at supporting gays or immigrants. First, artists are historically a less politically divisive constituency than gays or immigrants. Second, it is easy to imagine how funding can increase a bohemian milieu, whether by investing in arts-related infrastructure or events. Overall, Florida’s emphasis on the role of artists in economic development has influenced many cities to re-value the arts and incorporate cultural policy into broader urban economic growth strategies.

IV. Supporting Literature

Many scholars support the notion that amenities are important for urban economic vitality. Sociologist Terry Clark (2002) is one of the most adamant proponents of this theory, as made apparent in his article titled “Amenities Drive Urban Growth.” Clark describes the historical and global transitions in economics that have given rise to an increased demand for amenities, whether by citing the transition to the knowledge economy or examining the way new technologies have increased the circulation of cultural tourists by reducing travelling costs and
improving access to information. Most significant for Florida’s work, Clark describes the city as an “Entertainment Machine” (Clark, Lloyd, Wong, & Jain, 2002, p. 494). Clark argues that cities’ economies today are less dependent on production and more dependent on consumption. He follows by stating that “much of consumption is driven by local specifics: cafes, art galleries, geographic/architectural layout, and aesthetic image of a city define its unique attractions…” (p. 494). Clark’s position that amenities are central to urban economic development supports Florida’s Creative Class theories and implied policy propositions; namely, that cities should support investment in the arts and entertainment.

In addition, a number of international studies directly test whether or not Florida’s Creative Class theories and empirical findings hold true in foreign countries and cities. One of the most comprehensive international studies is Ron A. Boschma and Michael Fristch’s 2009 report “Creative Class and Regional Growth—Empirical Evidence from Seven European Countries.” For this report, teams in each country assembled data for more than 450 regions total. The study essentially tests two hypotheses: (1) whether or not the Creative Class is attracted to areas that are open, tolerant, and culturally rich and (2) whether or not the presence of the Creative Class is correlated with regional economic growth (Boschma & Fritsch, 2009).

To test the first hypothesis, Boschma and Fristch imitate Florida’s model by examining correlations between the Bohemian Index and the presence of the Creative Class. Following Florida’s logic, Boschma and Fristch argue that “a high proportion of bohemians indicates a kind of local culture, lifestyle, and set of values that are different from the mainstream. Being artistically creative, according to Florida
(2004), bohemians add a meaning of liveliness to a location and tolerance (openness to different lifestyles and values), which makes the region attractive for the two other types of the creative class” (p. 17). Although their methods mostly follow Florida’s prescripts, their model differs in three significant ways. First, they identify the dual role of the bohemians as both members of the Creative Class and agents whose presence attracts the Creative Class. As such, they disaggregate bohemians from the larger Creative Class when running their correlations.

The second difference is that they use contemporaneous data in their correlations, identifying whether or not the presence of bohemians coincides with the presence of the Creative Class for the year 2002. This type of analysis may be subject to criticism on the basis that it does not address the problem of causality; who came first, bohemians or the Creative Class?

The final difference is that they use different control variables when measuring for an open, tolerant, and creative milieu. While they maintain an Openness Index synonymous with Florida’s Melting Pot Index (i.e., the number of foreign born residents), they omit the Gay Index due to lack of data. Furthermore, they control for four other variables which are of interest for this thesis. First, they create the Public Provision Index which measures the share of the workforce working in public health care and public education. Second, they create a Cultural Opportunity Index that measures the share of the workforce engaged in cultural and recreational activities such as bars and restaurants, film, video, radio and television, and museums, libraries, etc. Third, they control for employment opportunities by taking into account the annual employment growth rate in the preceding ten years.
Finally, they control for population density, which attempts to capture the effect of a denser, urban atmosphere. All of these variables are potential factors that might attract the Creative Class, apart from the Bohemian Index. In Chapter 2, I incorporate some of these variables into my study to determine their role in U.S. cities.

Overall, the study claims that “the outcomes clearly show that there is a close relationship between the presence of bohemians and the other categories of the creative class at the regional level in Europe” (p. 20). Boschma and Fristch “conclude that a regional climate of culture and openness tends to attract members of the creative class” (p. 21). While these findings seem to support Florida’s hypothesis, their significance is unclear given that the data is contemporaneous, and does not attempt to impose a causal logic. Future research in Europe should build off of this model, but attempt to incorporate time-series data.

With regards to the second hypothesis, the study attempts to determine whether or not concentrations of the Creative Class in 2002 correlate with regional growth, using subsequent employment growth rates as their dependent variable. When controlling for the effect of the Creative Class on employment growth, the study uses the following variables: education level, bohemians, and population density. The results of their study indicate that creativity is the most significant indicator of employment growth, even more-so than education levels. Nevertheless, here the study admits to problems of causality. Boschma and Fristch extend their model in attempts to take causality into account, specifically testing whether or not the presence of the Creative Class begets business formation—measured as the number of start-ups in 2002—and innovation—measured as the number of patents.
between 1996 and 2000. Here again I raise the question as to whether or not this model captures the appropriate direction of causality, especially since the time periods for the dependent variables are either contemporaneous or before the independent variables.

Regardless, the study finds a positive correlation between the presence of the Creative Class and start-ups when controlling for the other variables, though the relationship is less significant with regards to patents. Based on this study, Boschma and Fristch claim that “the results of our analysis…tend to confirm most of the hypotheses suggested by Florida in regard to the creative class and its effect on regional development” (p. 28). While aspects of the study are troubling (perhaps to the extent that they might compromise the findings), the study is valuable in its attempt to capture such a wide range of regions in Europe given the data variations and limitations. Future research should build off of the data presented in this study in order to generate more robust tests of Florida’s hypothesis in a European context.

While the above study generally supports Florida’s hypothesis, other domestic and international studies find evidence that undermines or contradicts the Creative Class theory. A number of these critical studies are examined in the following section.

V. Critical Literature

The literature questioning and critiquing Florida’s hypothesis is quite extensive. In this section I divide the critical literature into two themes: technical critiques and conceptual critiques.
Technical Critiques

To begin, many scholars question how Florida defines and categorizes the Creative Class. Florida argues that “the distinguishing characteristic of the Creative Class is that its members engage in work whose function is to ‘create meaningful new forms’” (2002a: 68). He uses occupational data from the U.S. Bureau of Labor Statistics (BLS) to determine what occupations are ‘creative’ enough to belong in the Creative Class, sorting the remaining occupations into the Working and Service Class categories. Terry Flew, a professor of Media and Communications at the Queensland University of Technology in Brisbane, begins by questioning the whole basis of Florida’s classification system. Flew points out “the significant problem of the lack of any clear and widely accepted measures of creativity” (Flew, 2010, p. 88). Because ‘creativity’ is so elusive and all encompassing, dividing the workforce into creative and non-creative people is no easy or straightforward task. Many critics claim that Florida’s categories are too broad, and that some of the occupations included in the Creative Class are not necessarily more creative than occupations relegated to the Service and Working Class. Ann Markusen, a professor of public affairs at the University of Minnesota, points out that Florida’s classification system is based on major occupational groups, and laments that “he does not look inside each of these to see what they contain. Business and financial occupations, for instance, includes claims adjusters and purchasing agents…Computer and mathematicians include actuaries and tax collectors” (Markusen, 2006, p. 4). Due to the lack of a
systematic and detailed filtering of occupations, Markusen worries that Florida’s
categories lose significance.

Another major critique comes from economist Edward Glaeser, who claims
that Florida’s Creative Class is simply a proxy for human capital, arguing that the
category simply captures a subset of the workforce with a higher education. As such,
Glaeser states that Florida’s Creative Class theories are really no different from his
own human capital theories. In his review of Florida’s book, Glaeser highlights how
he has been running regressions since 1994 in order to test his hypothesis that
agglomerations of human capital lead to idea production, ultimately resulting in urban
growth. In order to test whether or not true difference exists between the Creative
Class and human capital, Glaeser runs a series of regressions using Florida’s data, but
controlling for educational attainment. The results demonstrate that the statistical
significance of Florida’s Super-Creative Core, patent variable, Gay Index, and
Bohemian Index all turn negative and become statistically insignificant when
educational attainment is taken into account. As a policy prescript, Glaeser suggests
that “mayors are better served by focusing on the basic commodities desired by those
with skills, than by thinking that there is a quick fix involved in creating a funky, hip,
Bohemian downtown” (Glaeser 2004).

Not only are Florida’s categories critiqued because of their vague parameters
and conflation with higher education, but his ranking systems and statistical
methodology also come under fierce scrutiny from a number of scholars. Many
critics argue that Florida’s rankings oversimplify the relationships between different
variables. Recalling the Composite Diversity Index, this index seems particularly
vulnerable to critique given that it is based on a compression of how cities rank on three other indexes of tolerance; the Bohemian Index, Gay Index, and Melting Pot Index. Peck takes issue with what he calls the “endlessly manipulated” ranking systems generated by Florida (p. 746), noting that “when challenged on his rankings, Florida has responded by effortlessly re-quantifying urban economic performance in various ways, thereby restoring the chosen creative cities to the top positions” (p.757). Peck finds the ranking system particularly worrisome because cities often use them as tools for legitimizing investment in some funky arts project aimed at attracting more creative people. Peck worries that cities unquestioningly accept Florida’s causal logic despite the fact that his model is not robust, but is instead weakly “fashioned on the basis of some suggestive correlations” (p. 757).

Many other scholars similarly warn that Florida’s causal logic is not strongly supported statistically. With regards to the association between Bohemians and high-tech growth, Markusen (2006) suggests that “perhaps causality works in the opposite direction: successful high tech centers generate wealth that is partly converted into arts patronage” (p. 15). Many critics are not convinced by Florida’s simple correlations, stressing that more empirical evidence is needed before cities begin taking his policy prescripts seriously. As the next section shows, Florida does not only face criticism based on technical elements of his empirical work such as faulty categories or weak correlations—his theories encounter conceptual criticism as well.
Conceptual Critiques

Conceptually, Florida’s Creative Class theories are challenged by more traditional theories of urban growth and development. Specifically, scholars argue that Florida’s theories do not acknowledge the economic importance of how firms and industries are spatially distributed. Florida is critiqued on the basis that he does not take into account how geography, industry, or infrastructure impact job creation, idea-generation, and economic growth.

For various reasons, the industrial composition of a region has long been considered to be strongly related to its economic well-being. Whether the industrial composition of a city is diverse or specialized will affect the productivity of firms.

There is a historical debate about whether industrial diversity or specialization favors economic growth. Urban theorist Jane Jacobs suggests that industrially diverse cities will experience more economic growth because of local competition and knowledge spillovers. Jacobs asserts that the more important transfers of knowledge occur in informal spaces outside of the industry complex: geographic proximity is important in that it allows firms to learn from one another. Furthermore, Jacobs argues that proximity will also force firms to compete for the best product by innovating rapidly and striving to take advantage of the latest technologies (Jacobs, 1961, p. 197).

On the other hand, there are competing theories that favor specialization. The Marshall-Arrow-Romer (MAR) theory states that “the concentration of an industry in a city helps knowledge spillovers between firms and, therefore, the growth of that industry and of that city” (E. L. Glaeser, Kallal, Scheinkman, & Shleifer, 1992, p.
In contrast to Jacobs who argues that competition between industries stimulates growth, the MAR theory suggests that specialization spurs growth by facilitating knowledge transfers within geographically proximate firms of the same industry.

Spawning from the MAR theory of specialization, business management theorist Michael Porter developed a cluster theory, lending particular attention to the benefits derived from the clustering of creative industries in cities. Porter finds that clusters of creative firms benefit from three specific competitive advantages. First, they experience productivity gains due to increased access to skilled labor pools, proximity to training institutions and universities, specialized information, and complementary relationships between firms. Second, they are privy to innovation opportunities due to pressures to innovate in a competitive environment, and interactions with buyers, suppliers, and others in close proximity to the firm. Finally, they have increased opportunity for new business formation due to access to new opportunities, access to resources needed by start-ups, and increased ease for mergers and takeovers due to geographic proximity (Porter, 1990). Flew (2009) examines how Porter’s creative cluster theory has been used to explain phenomenon such as Silicon Valley and Hollywood. Porter’s theory differs considerably from Florida’s as it maintains the importance of investing in firms rather than attracting people as a basis for spurring economic development.

A study by Donegan et al. (2008) compares traditional, firm-oriented growth models to Florida’s Creative Class model. To do so, they develop measures of industry diversity based on the output generated by manufacturing, business services,
and sole proprietorships. They analyze how well these indexes correlate with indicators of urban economic prosperity, such as job growth, change in income, and job stability. When compared to Florida’s Creative class indexes, Donegan et al. find that “Indicators of human capital or industry composition perform as well or better than talent, tolerance, and technology in explaining metropolitan job and income growth and job stability” (p. 180). As such, they advise that “economic developers should therefore not view strategies based on recruiting the creative class as substitutes for traditional approaches to local economic development, such as investments in education and policy support for entrepreneurship and industrial diversity” (p. 191).

Economists Michael Storper and Allen J. Scott reinforce the argument that policy makers should remain focused on traditional factors like industrial composition and firm formation. Storper and Scott critique Florida for disregarding how cities form in the first place, emphasizing “that an economic geography of urban growth that takes seriously the spatial logic of production can simultaneously account for how, from small initial events, clusters of economic activity grow and evolve on the basis of various kinds of external economies and how they then are reinforced through circular and cumulative growth” (Storper & Scott, 2009, p. 153). Here, Storper and Scott demonstrate the importance of firm-oriented policy, with reference to the advantages garnered by cultivating Porter’s clusters. They critique Florida for relying too heavily on individual location choices as the driver of urban growth, stating that “it strains credulity to suppose that members of the creative class move about the economic landscape as though they were principally in search of amenity-
based gratification” (p. 156). Furthermore, they point out that agglomerations of creative people do not necessarily result in production or innovation, arguing that history and geography play a more important role (p. 163). In sum, Storper and Scott dismiss Florida’s thesis as incomplete and argue for a more effective explanation of urban growth focused on the economic geography of production with particular attention to the interaction between firm location and labor migration.

Within this vein of critique, economists Høgni Kaslø Hansen and Lars Winther (2010) argue that Florida’s theory does not take into account where cities are positioned in regional, national, and international networks of production. Like Storper and Scott, Hansen and Winther emphasize that the geographic and historical contexts of cities must be taken into account, given that “regional and economic development is path-specific and follows specific trajectories” (Høgni Kalso Hansen & Winther, 2010, p. 7). Hansen and Winther note several problems with the widespread application of Florida’s theories. First, larger, well-established, global cities like London and San Francisco already possess significant advantages in the competition for skilled labor. Smaller cities—like Homer, Alaska, for instance—often do not have the preconditions necessary to develop the types of amenities that Florida speaks of, let alone attract the Creative Class away from larger hubs. Hansen and Winther point out that it takes a long time to change the economic dynamics of a region; labor markets do not change abruptly because of an urban makeover. Hansen and Winther worry about the growing trend amongst smaller cities to adopt the amenities-growth paradigm as the cure to all ills, questioning whether or not such
investments sum up to being simply “a sack of money that could have been used more efficiently elsewhere” (p. 8).

Flew echoes this critique, warning about the dangers of implementing “policy script” derived from the experiences of a select few global cities (Flew, 2010, p. 89). Furthermore, he brings back the question of causality; “do creative industries cluster in global cities because they are global centers of commercial activity, or do particular cities become centers of global commercial activity because of their cultural features and the creative attributes of their populations?” (p. 89). Certain policies working in specific contexts do not ensure that all cities will benefit in the same way. Flew warns of the weaknesses of policy transfers, especially as the Creative Class theory takes wind internationally, becoming the ‘master discourse’ in urban economic development.

While some critics argue that cities need to be understood in their wider regional contexts before implementing Florida’s amenities prescripts, other critics add that it is also necessary to zoom in and analyze the spatial geography of cities on a sub-metropolitan level. Cities are by no means homogenous units; rather, zones and neighborhoods vary wildly in terms of demographics and industrial specialization. Different development strategies may be appropriate for different parts of the city. Economist Paul Gottlieb argues that “some amenities are meaningless when averaged over a territory that is too large—either because they are not really accessible from the entire area, or because such averages eliminate underlying variation” (Gottlieb, 1994, p. 279). He suggests that future studies analyze urban geographies of
production using census tract data to get a more detailed assessment of the interplay between amenities, labor, and productivity.

While many conceptual critiques of Florida’s thesis revolve around the lack of a historical, contextual, or geographical analysis of growth patterns in cities, another major school of critiques stem from a completely different side of the equation. Here, Florida’s underlying assumption about the mobility of the Creative Class is seriously challenged. Below I highlight a series of empirical studies aimed specifically as testing Florida’s assertion that the Creative Class is highly mobile.

I begin with a groundbreaking study conducted in Sweden in 2008, which, for the first time, addressed the question of mobility in the Creative Class. By analyzing survey data from nearly 5000 respondents, the study seeks to determine (a) whether or not the Creative Class is more mobile than other classes, (b) if they are more selective in their destination choices, and (c) if the migrate for different reasons than other migrant groups (H. K. Hansen & Niedomysl, 2009). Because the Creative Class was so markedly correlated with human capital in Sweden, the study tracks the migration patterns of the highly educated, comparing results with less educated people. The results of the study are striking. First, it finds only a marginal difference between migration patterns of the Creative Class and those of other classes. Second, results from the questionnaire indicate that factors associated with a strong people climate do not rate high as draws for the Creative Class. Instead, the study finds that “highly educated people tend to move down the people climate hierarchy,” (p. 199). This finding that severely contradicts Florida’s theories and his assumptions about the mobility of the Creative Class.
Furthermore, the study finds that employment opportunities are the primary drivers behind migrant decisions. Finally, the study finds that the reasons for migration do not differ much between highly educated and less educated people (p. 201). Once mobility is taken into account, the striking results of the study lead it to conclude that Florida’s hypothesis is simply “wrong” (p. 204).

In 2010, another European study was conducted analyzing the mobility of the Creative Class (Martin-Brelot, Grossetti, Eckert, Gritsai, & Kovacs, 2010). The study collects empirical data from eleven European cities, with 2,300 professional respondents. One aim of this survey was to determine whether or not personal attachments such as family and friends play any role in the location decisions of the Creative Class. The study finds that creative people indeed follow so-called ‘personal trajectories,’ with employment opportunities and personal ties to people ranking far above cultural opportunities as reasons for migration (p. 862). Like the Swedish study, the results of this study undermine Florida’s thesis, pointing out the underlying assumptions about mobility. While Florida’s thesis assumes that creative people “make location choices in the same way that they choose a trip for a vacation week” the results of the study indicate that workers have more profound, personal attachments to people and place (p. 867).

A comprehensive study of the mobility of the Creative Class in the United States has not yet been undertaken. Nevertheless, a few studies have analyzed the migration patterns amongst different subgroups of the Creative Class. The results again put Florida’s thesis into question and highlight differences amongst the location preferences of Creative Class subgroups.
One study analyzed the role of amenities in the location choices of migrant engineers in the United States (Scott, 2010). The detailed study analyzes the movement of 13 subgroups of engineers between 1994 and 1999. The study explores the effect of both cultural and natural amenities, controlling for a number of other variables including industrial specialization in the destination locations. Interestingly, the findings report no significant association between amenities and migrant decisions. Instead, migrants appear to be highly drawn to areas that are specialized in their industry; “Aerospace engineers of working age are strongly attracted to places with well developed aircraft and parts and guided missile industries; chemical engineers to places with drugs, industrial chemicals and petroleum refining industries; civil engineers to locations where construction activities and engineer services are much in evidence; and so on” (p. 59). These findings support the MAR theory of specialization, Porter’s cluster theory, and other proponents of the connection between the spatial geography of production and economic growth examined earlier. They cast doubt over the amenities-attraction theory and suggest that educated migrants are drawn more to places with job opportunities and a productive economic structure that matches their skills.

In another study, Paul Gottlieb looks specifically at the location choices of high-tech firms (Gottlieb, 1994). The study reviews survey literature conducted between 1962 and 1992 and details how top executives rank amenities as factors in location choices, compared to other variables. While Gottlieb finds that “amenities are clearly viewed by executives as an important locational factor,” the survey results indicate that other factors related to business productivity were viewed as more
essential: “The factors that tended to rank above amenities were business ‘musts’ like market proximity and labor supply” (p. 273). Overall, quality of life amenities were found to drop in importance when business factors were taken into account. The study concludes that “there is no evidence that firms will seek out amenities to the exclusion of all other location factors. For high-tech firms in particular, the existence of agglomeration economies is perhaps the most important location factor” (p. 279). The results of this study challenge Florida’s theory that amenities are the primary draw for high-tech firms and their employees. Instead, the findings again lend support to cluster theories and growth theories grounded in an economic geography of production. High-tech firms and employees might not be as free to move about and locate wherever they please; they are still tied down by market conditions.

The study also finds that “high-tech firms tend to locate in the suburbs of large urban areas” (p. 276). This finding challenges underlying assumptions in Florida’s Creative Class theory, namely that high-tech firms and their employees are attracted to funky, artsy, gay-friendly inner city areas. Florida supports this assumption by using simple city-wide correlations that gloss over the important spatial divisions within the city itself. For example, in his article “Bohemia and Economic Geography,” Florida points out that there is a strong correlation between cities with a high Bohemian Index and cities with agglomerations of high-tech industry. He claims that “the findings here suggest a close relationship between bohemian clusters and high-technology industry” (2002b, p. 66). Even though artistic cities may coincidentally also be heavily involved in high-tech industries, this finding does not prove that the two industries are near to one another or causally related.
By examining the location of high-tech firms on a sub-metropolitan level, Gottlieb and other studies highlight the large gap between where firms locate and the ‘diverse, ‘tolerant,’ and ‘creative’ environments that Florida speaks of. While Gottlieb finds that high-tech firms locate in the suburbs, Markusen points out that artists tend to seek out ‘seedy’ inner-city living. Recognizing the spatial discrepancy, Markusen challenges Florida’s assumptions: “The relationship between artists and high-tech driven urban growth is far from clear…what does seem clear is that high-tech activity is not particularly attracted to pools of artistic talent—Silicon Valley, the capital of high-tech, has below average concentrations of artists” (p. 15). Thus, a closer analysis of the occupational geography of cities reveals that different subgroups of the Creative Class have different locational preferences and are pushed and pulled by varying factors. As such, Markusen argues that the Creative Class be disaggregated, and that each occupational subgroup be studied separately. Lumping artists, engineers, and high-tech workers into the same category erases important differences between these professional groups and prevents economic developers from pursuing effective and targeted policy aimed at recruiting and growing these different groups.

As these articles and empirical studies have shown, there are many conceptual challenges to Florida’s Creative Capital thesis. Some scholars criticize Florida for the narrowness of his logic, arguing that he ignores how larger contextual, historical, and geographic trends impact cities’ economic development patterns. Others critique Florida’s model as being too broad, stating that he must break down both cities and the Creative Class into smaller meaningful units. Finally, others point to large
unproved assumptions embedded in the Creative Class theory, such as presumptions about the mobility and preferences of the Creative Class. Combined, the conceptual and technical problems embedded in Florida’s Creative Class offer many points of departure for further research. In the following chapter, I construct my own empirical models to test Florida’s hypothesis and address some of the critiques outlined above.
CHAPTER 2: Empirical Explorations

I. Motivations for Further Study

Curiosity, critical literature, and confusion all compelled me to build my own empirical model to test Florida’s theories. My first motivation was simply to be able to see statistical results. Many of the claims made in Florida’s books and articles are based purely on simple correlations or fuzzy rankings: for example, if more than five cities land in the top rankings for the Bohemian Index and the tech-pole, this is taken as evidence that a relationship or trend exists (Florida 2002a. p. 262). In my analysis, I examined scatter-plots of a larger sample of cities, ran multiple regressions, and determined whether or not significant patterns emerged.

Secondly, I was motivated to untangle Florida’s model and clarify the direction of causality. As noted by other critics above, it is difficult to determine the directionality of Florida’s models. Markusen (2006) specifically questions whether or not bohemians or high-tech growth comes first.

Like Markusen, I was particularly confused by the model examining the relationship between bohemians and high-tech growth. It is unclear whether or not Florida is investigating a direct or indirect path association between the two variables:
a. *Direct Path:* Do artist directly affect high-tech growth?

| BOHEMIANS → HIGH-TECH GROWTH |

b. *Indirect Path:* Or do they only indirectly do so by attracting the Creative Class, which in turn spawns high-tech growth?

| BOHEMIANS → CREATIVE CLASS → HIGH-TECH GROWTH |

Florida seems to imply that he is investigating the latter model (b), but nowhere does he test the relationship between bohemians and the Creative Class, or between the Creative Class and high-tech growth. If he is testing the direct path (a), then it seems that he is testing for the relationship between bohemians and a subset of the Creative Class; high-tech workers. Florida’s larger “Creative Class” becomes irrelevant in this scenario, as only a small subset of this class seems to be important.

In the model I construct below, I explicitly define causal paths in order to clarify how the Creative Class interacts with the other two variables.

Furthermore, I take issue with the measures Florida uses when exploring the relationship between bohemians and the high-tech growth. Florida uses the tech-pole, developed by the Milken Institute, to investigate the relationship between bohemians and high-tech growth. However, the tech-pole does not truly capture high-tech *growth*, as it consists of only cross-sectional data for a single year. As defined by the Milken Institute, the ‘tech-pole’ is “a composite index combining the percentage of national high-tech real output and the concentration of high-tech industries – or location quotient – for each metro” (Milken Institute). As such, the positive relationship Florida finds between bohemians and the tech-pole does not help to
determine causality, as this measure fails to capture change in the high-tech industry over time. In order to determine the relationship between bohemians and high-tech growth more clearly, I developed an index measuring change in tech-pole scores between 2003 and 2007.

Another motivation to construct my own model was to capture a more holistic picture of economic growth using more measures. Florida uses the tech-pole, population growth, and employment growth as his indicators of economic prosperity. In addition to these indicators I added change in per-capita income, GDP growth, and, as mentioned before, change in tech-pole scores. Traditionally, factors like GDP growth are considered important when examining economic growth and prosperity.

I was also curious to verify some of Florida’s findings, seeing as the statistical analyses are not reported. Specifically, Florida asserts that a positive relationship exists between bohemians and population and employment growth. However, I could find no published report of statistical analysis supporting this claim. As such, I replicated the study by testing the direct relationship between bohemians and these indicators of economic prosperity. I also expanded the study and examined the indirect relationship by including the Creative Class, as in model (b) above.

Additionally, intrigued by the importance of industry composition to urban economic development, I wanted to develop an Industry Diversity Index against which to test Florida’s Creative Class theories. In my review of the literature, the report by Donegan et al. was the only study I found that directly compares the importance of industry diversity to Florida’s Creative Class model (Donegan, Drucker et al. 2008). Donegan et al. attempts to provide policy-makers with a basis
for comparing different strategies of economic development, and the findings indicate that traditional factors like industry diversity and education are more important than factors like the number of bohemians, for example. While Donegan’s findings are interesting, I noted that the measures used to determine industry diversity are weak and unrepresentative. Donegan uses the following three proxies to evaluate the industrial mix of a region: “the portion of a region’s total earnings from manufacturing, the portion of earnings from business services, and the portion of earnings from sole proprietorships” (p. 189). Limiting industrial composition to three categories seems arbitrary and does not provide the proper means for assessing how industry diversity might impact economic growth. In addition, it does not truly capture industry diversity in general; it simply investigates whether these particular industries are individually related to economic growth.

My search for a more holistic measure of industry diversity led me to the Hachman Index of industry diversity, developed by Frank Hachman while working for the Bureau of Economic Research at the University of Utah. The Hachman Index is an index of similarity “that measures how closely the employment distribution of the subject region resembles that of the reference region” (Moore, 2001). I found that many regions—from states to cities—had used the Hachman index to estimate how diverse their industry base was compared to the national average. The studies were usually part of larger reports focused on economic development strategies. Tracing these sources led me to Moody’s Economy.com where I found a similar index of industry diversity based off of the Hachman Index. Since the Hachman Index continues to be a standard measure of industry diversity, I decided to use it for my
model. In the *Methods* section below, I discuss exactly how I constructed the Industry Diversity index used in my model.

Finally, motivated by the European study by Boschma and Fritsch, I wanted to develop a Cultural Opportunity Index and a Public Provisions Index against which to test Florida’s Bohemian Index and Creative Class hypothesis. The Cultural Opportunity Index captures the share of the working force employed in Leisure and Hospitality (bars, restaurants, hotels, casinos, museums, sports, etc—captured as NAICS 70000000). The Public Provisions Index captures the share of the working force employed in Education and Health Services (schools, universities, hospitals, social assistance, etc—captured as NAICS 65000000). In the model I construct below, I test how Florida’s Bohemian Index compares to these measures in attracting the Creative Class and stimulating economic growth. Similarly I investigate how these indexes compare directly to the Creative Class when predicting economic growth.
II. Design of Model

In my model, I explore both the direct and indirect relationships between the different variables, as illustrated by the diagram below:

**Diagram 1: Overall Structure of Model**

**Diagram 2: Part I of Model**

As Diagram 2 below demonstrates, in Part I of my model, I am attempting to answer the question; what factors attract the Creative Class?

To do so, I investigate which factors from 1990 are significantly correlated with the presence of the
Creative Class in 2001. Florida argues that the presence of bohemians in a city indicates a creative milieu that will attract the Creative Class. However, this class of individuals might alternatively be attracted to mainstream cultural opportunities (Cultural Provisions), better educational and health services (Public Provisions), agglomerations of educated people (Human Capital) or the industrial composition of a city (Industry Diversity).

**Part II:**

In Part II of my model, I attempt to answer the question; what drives urban growth? In this case I reconstruct all of the explanatory variables for the year 2000, and investigate the direct relationship between these variables and urban economic growth between 2000 and 2007. Florida argues that the Creative Class spawns economic growth because firms will relocate near agglomerations of creative people,
or these people will develop their own lucrative start-ups. He also tests for direct correlations between bohemians and factors such as employment growth, population growth, and the tech-pole. Here I replicate this direct-path analysis, but I also add other factors which might be important to economic growth such as Human Capital, Public Provisions, Cultural Provisions, and Industry Diversity. I hope to analyze how these indexes compare to Florida’s indexes in determining urban economic growth.

In addition, by exploring the relationship between the Creative Class and urban growth, this model determines whether or not the 1990 explanatory variables from Part I indirectly relate to urban growth by attracting the Creative Class. This analysis is particularly important for understanding the indirect relationship between arts, the Creative Class, and urban growth.

Limitations of the Models:

There are some limitations or imperfections in the model that I was willing to accept in order to run the analysis. First, for Part I, I originally hoped to examine how 1990 factors impacted growth of the Creative Class share between 1990 and 2000. However, due to data limitations, I was only able to obtain cross-sectional data for the Creative Class in the year 2001 (as documented in Appendix B, Table 2 of Florida’s book Rise of the Creative Class). As such, in Part I, I am investigating correlations between cross-sectional data. For Part II, data limitations impeded me from capturing the exact same time frame for each dependent variable. For instance, change in GDP is measured between 2001 and 2007, while change in population is measured between 2000 and 2007. However, the time frames are similar enough that I am willing to accept these discrepancies.
III. Methods

Sample:

As a sample I decided to use the same fifty cities that Florida used in his study Bohemia and Economic Geography. In the appendix to his study, Florida included a table listing all of the cities along with their Bohemian Index. Using this sample would allow me to compare my results directly with Florida’s.

One difficulty I ran into while collecting data was matching the names of the cities and preserving consistency in the unit of geography that I was measuring. This was particularly difficult as I gathered data from different time periods, as some cities have been re-zoned or changed their names. Wherever possible, I tried to follow Florida’s model: “For most regions, the metropolitan statistical area or MSA is employed as the unit of analysis…The consolidated metropolitan statistical area or CMSA is used as the unit of analysis for the five largest regions: San Francisco, Los Angeles, Miami-Fort Lauderdale, New York, and Dallas-Fort Worth” (2002b, p. 59). I used MSA and CMSA names from the Bureau of Labor Statistics as a basis, and wherever possible tried to remain consistent with Florida’s data. If the name or geographical unit had been altered, I attempted to maintain consistency when analyzing a region over time. San Francisco was particularly problematic, as Florida used the CMSA in his analysis which includes San Jose. In most of the data sources I used, San Jose and San Francisco are listed as two separate CMSAs. In order to obtain CMSA values, I aggregated data from the two cities, weighting the values by the size of the population.
**Measures:**

The following table summarizes the various measures I used in my analysis:

<table>
<thead>
<tr>
<th>Variable Concept</th>
<th>Variable Names</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative Class Share</td>
<td>ccshare01</td>
<td>Share of the workforce employed in creative occupations as defined by Florida (2002a).</td>
<td>Florida, 2002a; Appendix B, Table 2</td>
</tr>
<tr>
<td>Bohemian Index</td>
<td>boho1990</td>
<td>The relative number of artists in a city compared to the national average, 1990 &amp; 2000.</td>
<td>Values for Boho1990 are found in Appendix 1 of Florida’s 2002b. Boho2000 values were provided courtesy of Kevin Stolarick of the Martin Prosperity Institute.</td>
</tr>
<tr>
<td></td>
<td>boho2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>cult2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>pub2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ID2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Capital</td>
<td>HC1990</td>
<td>Percentage of the population 25 years or older with at least a college degree, 1990 &amp; 2000.</td>
<td>US Census Bureau</td>
</tr>
<tr>
<td></td>
<td>HC2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population Growth</td>
<td>pop_ch</td>
<td>Percent change in population from 2000 to 2007</td>
<td>US Census Bureau</td>
</tr>
<tr>
<td>Income Growth</td>
<td>pci_ch</td>
<td>Percent change in per-capita income from 2000-2008</td>
<td>Census</td>
</tr>
<tr>
<td>GDP Growth</td>
<td>gdp_ch</td>
<td>Percent change in GDP from 2001-2007</td>
<td>Bureau of Economic Analysis</td>
</tr>
<tr>
<td>Tech-pole</td>
<td>tp07</td>
<td>A composite index multiplying (1) a city’s share of North American high-tech employment by (2) a location quotient measuring the concentration of high-tech employment or wages as a percentage of a city's total employment or wages, compared to the average for all of North America.</td>
<td>Milken Institute</td>
</tr>
<tr>
<td>Change in Tech-Pole Scores</td>
<td>tp_ch</td>
<td>Percent change in tech-pole scores, 2003-07</td>
<td>Milken Institute</td>
</tr>
</tbody>
</table>

In later tables I will be using the ‘Variable Names’ as shorthand for the variables.
*Constructing the Industry Diversity Index:

The formula for developing the Industry Diversity Index is as follows (Moody’s Economy.com):

\[
\text{Diversity} = \frac{1}{\sum (\text{EMP}_{ij}/\text{EMP}_{USj}) * \text{EMP}_{ij}}
\]

- Where EMP = share of employment in industry j
- i = MSA
- US = U.S.

The diversity measure is bounded between zero and one; as the value approaches one, it signifies that the employment distribution in a city more closely resembles the diverse employment distribution found at the national level. Values closer to zero signify that the city has a more specialized employment distribution. I used data from the Bureau of Labor Statistics (BLS) to construct the Industry Diversity index for my 50 sample cities.

When constructing the index, I had to choose the proper system of classification and level of aggregation for my analysis. The BLS sorts industries according to two different classification systems. The first is the Standard Industrial Classification (SIC) system that has been in place since 1930 and was phased out by BLS in 2002. The second is the new North American Industry Classification System (NAICS) that was adopted in 1997; however, the BLS has made data available according to NAICS classifications extending back to 1990. In this study, I use the NAICS classification systems instead of the SIC system because there was incomplete data for thirteen cities when I attempted to use SIC data at the two-digit level.
IV. Results and Analysis:

In this section I first explore results from Part I, later moving on to explore my findings for Part II. In each case, I begin with a table of descriptive statistics followed by simple regressions and exploratory analysis. I use scatter-plot graphs to observe patterns or pinpoint outliers that may skew the results. After the exploratory analysis, I present a full model of my findings comparing all of the different variables. I analyze my results using scatter-plot graphs to illustrate patterns or points of interest.

Part 1: What factors attract the Creative Class?

Table 2: Descriptive Statistics for Part I

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>boho1990</td>
<td>49</td>
<td>1.15</td>
<td>0.28</td>
<td>0.7</td>
<td>1.93</td>
</tr>
<tr>
<td>cult1990</td>
<td>49</td>
<td>9</td>
<td>2.4</td>
<td>6.27</td>
<td>20.68</td>
</tr>
<tr>
<td>pub1990</td>
<td>49</td>
<td>10.43</td>
<td>2.26</td>
<td>5.34</td>
<td>16.85</td>
</tr>
<tr>
<td>HC1990</td>
<td>49</td>
<td>19.6</td>
<td>7.93</td>
<td>7.81</td>
<td>63.82</td>
</tr>
<tr>
<td>ID1990</td>
<td>49</td>
<td>0.9</td>
<td>0.05</td>
<td>0.74</td>
<td>0.99</td>
</tr>
<tr>
<td>ccshare01</td>
<td>48</td>
<td>31.06</td>
<td>2.83</td>
<td>26.43</td>
<td>39.81</td>
</tr>
</tbody>
</table>

Table 2 allows the reader to observe descriptive statistics about the variables, such as the mean, minimum, maximum, and standard deviation. These statistics help the reader better interpret the relative size of the coefficients in the regression tables.

Exploratory Analysis:

As Table 3 below shows, initial regression results suggested that all factors except Public Provisions were significantly correlated with the Creative Class, suggesting that they might all have a role in attracting these types of individuals to a
city. In line with Florida’s theories, the Bohemian Index is positively correlated with the Creative Class. This finding supports his theory that the Creative Class may be attracted to areas with a ‘creative milieu.’ Surprisingly, Cultural Provisions is negatively correlated with the Creative Class. The Cultural Provisions index I created captures mainstream entertainment options such as museums, sports, casinos, restaurants, and bars. These options do not appear to attract the Creative Class.

Perhaps this confirms Florida’s argument that the Creative Class is more attracted to an authentic creative milieu, as captured by the Bohemian Index, and demonstrates an aversion towards mainstream entertainment that might be considered artificial or mass-oriented.

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>cshare01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>boho1990</td>
<td>4.053**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.692)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cult1990</td>
<td></td>
<td>-0.513***</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>pub1990</td>
<td></td>
<td></td>
<td>0.267</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.210)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HC1990</td>
<td></td>
<td></td>
<td></td>
<td>0.213***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.0544)</td>
<td></td>
</tr>
<tr>
<td>ID1990</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>174.4***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(45.39)</td>
</tr>
<tr>
<td>ID21990</td>
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<td></td>
<td></td>
<td></td>
<td>-103.2***</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(28.93)</td>
</tr>
<tr>
<td>Constant</td>
<td>26.10***</td>
<td>35.66***</td>
<td>28.03***</td>
<td>26.61***</td>
<td>-42.08**</td>
</tr>
<tr>
<td></td>
<td>(2.007)</td>
<td>(0.916)</td>
<td>(2.213)</td>
<td>(1.143)</td>
<td>(17.68)</td>
</tr>
<tr>
<td>Observations</td>
<td>49</td>
<td>49</td>
<td>49</td>
<td>49</td>
<td>49</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.109</td>
<td>0.422</td>
<td>0.033</td>
<td>0.247</td>
<td>0.295</td>
</tr>
</tbody>
</table>

Table 3: Exploratory Regressions Relating 1990 Explanatory Variables to Creative Class Share 2001

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1
The Human Capital Index appears to be more strongly associated with the Creative Class share than the Bohemian Index, with the correlation significant at the one percent level. Perhaps the Creative Class is more attracted to places with high agglomerations of human capital than bohemians. On the other hand, taking into account Glaeser’s critique described in Chapter 1, the significant relationship observed between Human Capital 1990 and Creative Class 2000 may not provide any new insight. Glaeser argues that the Creative Class captures the proportion of the workforce that is educated. Therefore, one might expect the positive and significant relationship observed between the two variables; educated members of the workforce in 1990 may still live in the same city ten years later, and factor into the Creative Class count in 2000.

The one variable that surprised me was the Industry Diversity Index. At first, I was interested to find that this index appeared to be significantly associated with the Creative Class. However, upon closer examination, I was confused by the negative sign in front of coefficient for the quadratic specification for the Industry Diversity Index (-103.2). The negative sign would suggest an inverted pattern for Industry Diversity than the one expected; a pattern that would contradict the theories that either industry specialization or diversity favor economic growth and attract the Creative Class. In order to examine the
relationship more closely, I produced a scatter plot graph as shown in Figure 1. Figure 1 demonstrates that an outlier—Las Vegas—was skewing the results. Las Vegas is not widely regarded as representative of the typical American city, and this figure captures some of the ways in which it differs from other large American cities: Las Vegas has a very specialized industry, focused on hospitality and entertainment. However, it has a very low proportion of the Creative Class. Perhaps this outlier was skewing the results to the extent that it inverted the expected shape of the quadratic, thereby explaining the negative coefficient. To check this hypothesis, I removed Las Vegas from the picture and observed the following pattern as delineated in Figure 2:

As shown, once Las Vegas is removed, the shape of the quadratic flips to the expected U shape, indicating that either industry specialization or diversification is favored by the Creative Class.

By analyzing other scatter plots, I found Las Vegas to repeatedly stand out as an outlier, consistently skewing the regression results. As such, I decided to remove Las Vegas from my analysis in order to better observe patterns and relationships between the other forty-nine cities and the variables of interest.

When I ran the simple regressions without Las Vegas, I obtained the following results:
As expected, the negative sign in front of the quadratic specification for Industry Diversity disappears. However, so does the significance of the variable; the Industry Diversity Index is no longer significantly correlated with the Creative Class share 2001. All other variables remained about the same once Las Vegas was removed, except that the significance of the Bohemian Index increased to the one percent level.

After running exploratory analysis, checking scatter-plots for outliers, and analyzing simple regressions, I was ready to build up a full model to test how the variables compared to one another in determining the Creative Class share 2001. Table 5 below illustrates my results:

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>boho1990</td>
<td>4.879***</td>
<td></td>
<td></td>
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<td></td>
<td>(1.301)</td>
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<td>cult1990</td>
<td>-0.434***</td>
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<td></td>
<td>(0.160)</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>pub1990</td>
<td>0.0153</td>
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<td></td>
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<tr>
<td></td>
<td>(0.184)</td>
<td></td>
<td></td>
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<tr>
<td>HC1990</td>
<td></td>
<td>0.186***</td>
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<td></td>
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<td>(0.0442)</td>
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<tr>
<td>ID1990</td>
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<td>-271.9</td>
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<td></td>
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<td>(173.9)</td>
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<td>ID21990</td>
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<td>150.0</td>
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<td></td>
<td></td>
<td>(99.42)</td>
<td></td>
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<tr>
<td>Constant</td>
<td>25.45***</td>
<td>34.97***</td>
<td>30.90***</td>
<td>27.40***</td>
<td>153.8**</td>
</tr>
<tr>
<td></td>
<td>(1.538)</td>
<td>(1.492)</td>
<td>(1.958)</td>
<td>(0.935)</td>
<td>(75.82)</td>
</tr>
<tr>
<td>Observations</td>
<td>48</td>
<td>48</td>
<td>48</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.234</td>
<td>0.138</td>
<td>0.000</td>
<td>0.279</td>
<td>0.083</td>
</tr>
</tbody>
</table>

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 4: Simple Regressions Relating 1990 Explanatory Variables to Creative Class Share 2001
As demonstrated, the Bohemian Index remains significant throughout, though the significance decreases to the five percent level once all variables are included as shown in Model 5. Cultural Provisions remains negative and significant at the one percent level throughout. Human Capital is positively correlated throughout, although the significance drops from the one percent level to the five percent level in Model 5, like the Bohemian index. The Public Provisions and Industry Diversity Indexes remain insignificant. The three scatter-plots below illustrate the significant relationships:
In general, these findings support Florida’s theory that the Creative Class is attracted to an authentic creative milieu as determined by the presence of Bohemians, as illustrated in the regression tables and in Figure 3. While other factors may also influence the locational decisions of the Creative Class, these findings support Florida’s theory that concentrations of artists may indeed have a positive effect on where these types of people choose to live and work.

Next I turn to Part II, where I analyze whether or not agglomerations of the Creative Class actually lead to economic prosperity.
**Part II: What drives urban growth?**

In this section I analyze how the Creative Class share and the Bohemian Index compare to other explanatory variables in determining urban growth. For each measure of urban growth, I analyze simple regressions, a full model, and scatter-plots.

**Table 6: Descriptive Statistics for Part II**

<table>
<thead>
<tr>
<th>Explanatory Variables</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>ccshare01</td>
<td>48</td>
<td>31.05</td>
<td>2.83</td>
<td>26.43</td>
<td>39.81</td>
</tr>
<tr>
<td>boho2000</td>
<td>49</td>
<td>1.13</td>
<td>0.4</td>
<td>0.72</td>
<td>2.50</td>
</tr>
<tr>
<td>HC2000</td>
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<td>17.67</td>
<td>2.79</td>
<td>13.78</td>
<td>25.21</td>
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<tr>
<td>ID2000</td>
<td>49</td>
<td>0.91</td>
<td>0.05</td>
<td>0.76</td>
<td>0.99</td>
</tr>
<tr>
<td>pub2000</td>
<td>49</td>
<td>11.5</td>
<td>2.74</td>
<td>7.06</td>
<td>18.53</td>
</tr>
<tr>
<td>cult2000</td>
<td>49</td>
<td>9.18</td>
<td>2.1</td>
<td>6.7</td>
<td>19.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Measures of Growth</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
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<tr>
<td>emp_ch</td>
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<td>4.60</td>
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<td>8.04</td>
<td>8.38</td>
<td>-15.70</td>
<td>27.36</td>
</tr>
<tr>
<td>pci_ch</td>
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<td>22.06</td>
<td>8.38</td>
<td>12.1</td>
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<td>6.86</td>
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<td>5.19</td>
<td>15.2</td>
<td>-50.19</td>
<td>34.88</td>
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</tbody>
</table>

Table 6 illustrates descriptive statistics for the variables used in Part II of my research. In general there are 49 observations because Las Vegas has been removed as an outlier. In some cases, there are fewer observations due to missing data on Baltimore.

1. **Employment Growth**

Table 7 below illustrates the simple regression results I observed when analyzing the relationship between the various variables of interest and employment growth. I find no significant relationship between either the Creative Class share or
the Bohemian Index and employment growth. These findings undermine Florida’s assertions that agglomerations of the Creative Class lead to economic growth, as

Table 7: Simple Regressions Relating Explanatory Variables to Employment Change

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ccshare01</td>
<td>-0.0452</td>
<td>-0.562</td>
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<td>R-squared</td>
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Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

determined by increased employment opportunities. Furthermore, the finding that the Bohemian Index is not significantly related directly contradicts Florida’s statement that “the main predictor of employment growth is the Bohemian Index” (2002a, p. 263). While I am using data from ten years later than what Florida used, I would expect some consistency in results. Figures 6 and 7 illustrate the relationships between Florida’s indexes and job growth:
The associations are quite weak to non-existent, or at most inconsistent. Cities like Phoenix and Orlando have below average proportions of the Creative Class share, yet they have experienced the most job growth between 2000 and 2007. Boston and San Francisco have high proportions of the Creative Class and high Bohemian Indexes, but these cities have experienced job loss. These findings question the integrity of the results Florida presents, especially given that his findings and analysis are not publicly available. Even if the data and findings are legitimate, the fact that my results are so different implies that Florida’s theories may be specific only to a certain time period, subject to boom and bust cycles of prosperity. They may not be robust enough to support long-term policy decisions.

Interestingly, the results reveal an association between my Industry Diversity Index and employment growth, although the significance is weak at the ten percent level. Perhaps industry diversity or specialization is in some way related to job growth. The relationship is illustrated below in Figure 8.
Human Capital appears not to be significantly associated with employment growth, a finding that undermines Glaeser’s human capital theories. As in the case of the Creative Class, it appears that neither agglomerations of creative people nor agglomerations of intellectuals appear to spawn employment growth.

Strangely, as demonstrated by Figure 9, Public Provisions appear to be negatively related to employment growth, with the relationship being strongly significant at the one percent level. I had expected Public Provisions like education and health-care to boost employment growth: schools and universities train students to become effective in the work force, and health-care both employs people and keeps the public healthy and employable. Nevertheless, as my results indicate, Public Provisions do not appear to have a positive effect, and seem even to be a drain on the economy in terms of employment opportunities. Perhaps the negative correlations reflect inefficiencies in the health-care and educational services, or lack of public support for these sectors. Further research should investigate this negative relationship in order to better inform and direct education and health-care policy.
Finally, Cultural Provisions appear to have a positive effect on job growth, significant at the five percent level. This finding is especially interesting given that, in Part I, Cultural Provisions was negatively correlated with the Creative Class at the one percent level. Clearly Cultural Provisions do not boost the economy indirectly by attracting a Creative Class; however, perhaps they form a strong industry in and of themselves. Places with strong amusement, entertainment, or tourist opportunities appear to have experienced much more job growth than other cities. Figure 10 demonstrates how vacation destinations like Orlando, West Palm Beach, and Honolulu are capable of rapid employment growth as their tourist industries expand.

Having reviewed the simple regression and analyzed the various scatter-plots, I was ready to examine the full model comparing all of the different variables to one another. I hoped to determine whether or not the significance of different variables changed when all factors were taken into account. Table 8 below illustrates my findings:
Interestingly, as Model 4 demonstrates, the significance of my Industry Diversity Index increases from the ten percent level in the simple regressions to the five percent level when compared to the Creative Class share, the Bohemian Index, and Human Capital in determining employment growth. This finding suggests that Industry Diversity is a better predictor of employment growth than those other factors, a finding that throws doubt on the viability of Florida’s theories.

Nevertheless, the significance of the Industry Diversity Index disappears in Model 5 once the Public Provisions Index is taken into account, demonstrating that this variable has the strongest—albeit negative—relationship to employment change.
Once cultural provisions is included, the significance of the Public Provisions Index drops to the five percent level, but continues to be the single significant indicator of employment change.

2. Population Growth

Table 9 below displays the simple regressions I observed when analyzing the relationship between various variables and population growth:

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<td>R-squared</td>
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<td>0.021</td>
<td>0.015</td>
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</table>

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Similar to my examination of employment growth, neither of Florida’s variables were significantly correlated with population growth. Again, this finding directly contradicts Florida’s assertion that the Bohemian Index is one of the

While population growth is not a direct measure of economic growth, increased population in a city demonstrates an increased ability of the city to sustain larger amounts of people. My findings here suggest that greater numbers of bohemians and Creative Class members do not necessarily catalyze the economic growth needed to attract and sustain more people in a city. These findings weaken Florida’s Creative Class theories and the credibility of his growth strategies. Figures 11 and 12 show the relationships between Florida’s variables and population growth:

With regards to Human Capital, Industry Diversity, and Cultural Provisions, the simple regression results indicate that these variables have no significant relationship to population growth. The finding that Human Capital is not related further undermines Glaeser’s theories that agglomerations of intellectuals spur urban growth as measured by population growth.

The only variable of significance appears to be Public Provisions which—as in the case of employment growth—is negatively correlated with population growth at the one percent level. Figure 13 below demonstrates this negative relationship:
Having analyzed the simple regressions and the scatter-plots, Table 10 below presents the full model comparing the different variables to one another:

**Table 10: Full Model Relating Explanatory Variables to Population Change**

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<tr>
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<th>(5)</th>
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<td>R-squared</td>
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Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The results from the full model demonstrate no change in the significance of the different variables when they are compared against one another. Public Provisions remains the only variable that is significantly—although negatively—
correlated with population growth. The fact that neither of Florida’s variables are significantly correlated further cast doubt on his Creative Class theories.

Unfortunately, because no factors are positively and significantly related to population growth, it is difficult to make concrete recommendations for policy-makers interested in growing the number of people in their cities. Further research is necessary to determine what factors might provoke population growth.

3. *Per-Capita Income Growth*

Table 11 below displays the simple regressions I observed when analyzing the relationship between various explanatory variables and per-capita income growth:

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<thead>
<tr>
<th>VARIABLES</th>
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<th>(5)</th>
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</tr>
<tr>
<td>R-squared</td>
<td>0.011</td>
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<td>0.037</td>
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<td>0.048</td>
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</table>

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
As with population and employment growth, no variable appears to be significantly related to per-capita income growth except Public Provisions. The results of these simple regressions do not support Florida’s Creative Class theories, as neither the Creative Class nor the Bohemian Index are significantly related to per-capita income growth. Figures 14 and 15 below illustrate this point.

Interestingly, New Orleans appears to have experienced the highest increase in per-capita income between 2000 and 2007. The vast increase in per-capita income in New Orleans is surprising given its population loss and job loss, as well as the damages suffered when Hurricane Katrina hit the city in 2005. Perhaps these contradictory findings reflect a limitation of the data, in that I only capture differences between 2000 and 2007 without taking into account year-by-year fluctuations in local economies. Conversely, perhaps the city is rebounding from the damages suffered. My results here indicate that the city is experiencing a degree of prosperity with regards to increased personal wages. However, this prosperity appears to have nothing to do with increased numbers of the Creative Class or bohemians, as this city ranks below average with regards to both of these variables. As demonstrated by the
status of other cities like San Francisco, having a high Bohemian Index or Creative
Class share does not necessarily lead to increased personal income; other factors must
be responsible.

With regards to the other
variables, factors such as Human Capital,
Cultural Provisions, and Industry
Diversity appear not to be significantly
associated with per-capita income growth
either. As noted, Public Provisions is the
only variable demonstrating a significant association with per-capita income growth.
Interestingly, in contrast to the previous models, this time Public Provisions appears
to be positively related to the measure of economic growth, although the association
is weak at the ten percent level; this subtle positive relationship is illustrated in Figure
16. Thus, while Public Provisions are negatively related to population and
employment growth, they appear to have a contrasting, positive relationship with per-
capita income growth. In order to better inform public policy, further research should
probe why increased health and educational services appear to be connected to rising
income.

Having reviewed the scatter-plots of interest and simple regressions, I now
turn to the full model, as shown in Table 12 below:
As with the simple regressions, these results demonstrate that there is no positive or significant relationship between Florida’s explanatory variables and per-capita income growth, even when all other factors are taken into account. These findings again challenge Florida's Creative Class theories as his variables appear not to be effective indicators of prosperity.

With regards to Human Capital, the results are mixed. Interestingly, Models 3-6 demonstrate that when other variables are taken into account, Human Capital appears to have a significant, albeit negative, relationship with per-capita income growth. I produce the scatter-plot below to examine the trend more carefully:
While the association is not strong, there does appear to be a slight downward trend with regards to per-capita income growth in cities with higher levels of human capital. The negative relationship contradicts Glaeser’s theory that conglomerations of human capital will lead to economic growth and prosperity.

With regards to Industry Diversity, in Model 5, this variable appears to have a weak relationship to per-capita income change when compared to the other variables. I examine the relationship more closely in Figure 18 below. As shown, a weak association does seem to be apparent, but the significance falls away when all variables are taken into account in Model 6. Therefore, while Industry Diversity may be weakly associated with change in per-capita income, the relationship does not provide strong enough evidence upon which to suggest particular economic development strategies.
With regards to the other variables, Cultural Provisions do not appear to have any significant relationship to per-capita income change. In addition, the results do not support Florida’s Creative Class theories, as neither of his variables are significantly related to per-capita income change. Public Provisions remain positively—though weakly—correlated. As suggested before, future research should examine the effect of Public Provision on per-capita income to better inform policy.

4. GDP Growth

Table 13 below displays the simple regressions I observed when analyzing the relationship between various explanatory variables and GDP growth:

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<th>(4)</th>
<th>(5)</th>
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<td>cult2000</td>
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<td>2.361***</td>
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<td>Constant</td>
<td>29.84</td>
<td>31.58***</td>
<td>35.44***</td>
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<td>55.59***</td>
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<td>(6.447)</td>
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<tr>
<td>R-squared</td>
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<td>0.018</td>
<td>0.000</td>
<td>0.166</td>
<td>0.186</td>
<td>0.203</td>
</tr>
</tbody>
</table>

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Like in previous models, Florida’s variables remain insignificant. The Human Capital Index is also insignificant. Both Florida’s Creative Class theories and Glaeser’s Human Capital theories are disputed by these results. Interestingly, all three of the alternative explanatory variables that I created appear to be highly significantly correlated at the one percent level. Scatter-plots below examine these relationships in more detail:

**Figure 19: Industry Diversity and GDP Growth**

While the cities are somewhat scattered, there does appear to be a strong positive quadratic trend. Cities that are either highly specialized (Washington DC, Orlando, Honolulu) or highly diversified (Portland, Seattle), appear to experience high levels of GDP growth. At the same time however, some cities that lie in the middle of the Industry Diversity spectrum are also experiencing growth, indicating that the Industry Diversity Index may not be the best predictor of prosperity. Cities like Houston and Sacramento rank in the top 10 cities with regards to GDP growth, but they demonstrate neither a high degree of industrial specialization or diversification. Nevertheless, the regression model illustrates that the quadratic specification is highly correlated with GDP growth, a finding that is important for policy makers seeking to grow their economies. Furthermore, the finding challenges Florida’s neglect of industrial composition as an
important determinant of urban economic growth

As with the previous models, Public Provisions continue to have a strong negative relationship with economic prosperity. Figure 20 demonstrates this trend with regards to GDP growth. The negative relationship again suggests that education and health care systems may be imposing a drain on local economies instead of strengthening them.

Finally, Cultural Provisions appear to have a strong positive relationship with GDP growth, significant at the one percent level. Figure 21 illustrates this relationship. This finding is consistent with earlier findings that cities with many amusement and entertainment opportunities experience high levels of economic growth, although the results may be a bit skewed or exaggerated by influential observations such as Honolulu and Orlando.
## Table 14: Full Model Relating Explanatory Variables to GDP Growth

<table>
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<td>(0.577)</td>
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<td>1.081**</td>
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<tr>
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<td>(20.88)</td>
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<td>(345.0)</td>
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<td>R-squared</td>
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<td>0.018</td>
<td>0.033</td>
<td>0.204</td>
<td>0.354</td>
<td>0.463</td>
</tr>
</tbody>
</table>

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Having analyzed simple regressions and scatter-plots, I now turn to my full model. Interestingly, once all factors are taken into account, several changes occur to the coefficients and significance levels of the variables. In Model 6 where all variables are accounted for, Florida’s Creative Class share appears to have a mildly significant relationship to GDP growth at the ten percent level. The scatter-plot below examines this relationship:
From the scatter-plot, the relationship does not appear to be very strong. As Model 6 demonstrates, the explanatory significance of the Creative Class increases only once all other variables are included, perhaps highlighting the weak or scattered explanatory power of the other variables. Nevertheless, this finding does lend a small degree of support for Florida’s Creative Class theories.

Similar to the Creative Class Index, the Human Capital Index appears to be weakly correlated with GDP change in Model 6, although the relationship is negative. Figure 23 shows that the relationship is very weak.

In sum, Cultural Provisions appear to have the strongest and most significant relationship to GDP growth, underscoring how amusement, luxury, and entertainment may be highly lucrative industries in today’s economy. The findings do not provide strong support for Florida’s Creative Class theories, although the weak association between the Creative Class and GDP growth in Model 6 should be recognized.
5. *Tech-Pole 2007*

Table 15 below displays the simple regressions I observed when analyzing the relationship between various explanatory variables and economic prosperity as measured by the Milken Institute tech-pole 2007:

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
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<td>tp07</td>
</tr>
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<td>0.316***</td>
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<td></td>
</tr>
<tr>
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</tr>
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<tr>
<td>ID2000</td>
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<td>-395.1***</td>
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<td>(112.3)</td>
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<td>224.3***</td>
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<td>(63.40)</td>
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<td></td>
<td>(0.113)</td>
</tr>
<tr>
<td>Constant</td>
<td>-8.504***</td>
<td>-2.033***</td>
<td>-3.747***</td>
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<td>2.504**</td>
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<td></td>
<td>(2.274)</td>
<td>(0.570)</td>
<td>(1.342)</td>
<td>(49.66)</td>
<td>(0.998)</td>
<td>(1.060)</td>
</tr>
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<td>Observations</td>
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<td>49</td>
<td>49</td>
<td>49</td>
<td>49</td>
<td>49</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.290</td>
<td>0.447</td>
<td>0.236</td>
<td>0.216</td>
<td>0.071</td>
<td>0.028</td>
</tr>
</tbody>
</table>

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The results lend support for Florida’s theories, as both the Creative Class share and the Bohemian Index are strongly and positively correlated with the tech-pole 2007. Human Capital also appears to be strongly and positively correlated, a finding that supports Glaeser’s theories. Industry Diversity is also strong and positive. Public Provisions show a weak negative relationship, and Cultural
Provisions appear not to be significantly related. The following tables illustrate the significant relationships:

**Figure 24:** The Creative Class and Tech-Pole 2007

As demonstrated by Figure 24, the relationship between the Creative Class and the tech-pole is positive, although as proportions of the Creative Class increase, cities become more widely distributed around the line of best fit. Generally, the evidence supports Florida’s theory that cities with higher proportions of the Creative Class are more likely to have a larger high-tech industry.

Figures 25 and 26 demonstrate a similar pattern for the relationship between the tech-pole 2007 and explanatory variables such as the Florida’s Bohemian Index and Glaeser’s Human Capital Index.

**Figure 25:** Bohemian Index and Tech-Pole 2007

**Figure 26:** Human Capital and Tech-Pole 2007
Figure 27 displays the strong quadratic relationship between Industry Diversity and the tech-pole 2007. Cities that are either specialized or diversified appear to have higher tech-pole scores.

With regards to Public Provisions,

Figure 28 demonstrates the negative relationship between this explanatory variable and the tech-pole. Increased Public Provisions do not appear to positively affect the high-tech industry, a surprising finding given the role hospitals and universities often play in spurring and encouraging investment in high-tech ventures.

Having observed the various relationships of significance I now turn to the full model as illustrated below in Table 16. As demonstrated, all of the variables that were significant in the simple regressions remain significant in the final full regression when all other variables are taken into account; however, there are a few subtle changes. First, the significance of the Creative Class share decreases from the
one percent level to the five percent level. Second, significance of the Public
Provisions index increases to the five percent level.

**Table 16: Full Model Relating Explanatory Variables to Tech-Pole 2007**

<table>
<thead>
<tr>
<th>Variables</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
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<td>tp07</td>
<td>tp07</td>
<td>tp07</td>
<td>tp07</td>
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<td>0.316*** (0.0729)</td>
<td>0.206*** (0.0621)</td>
<td>0.310*** (0.106)</td>
<td>0.257** (0.0982)</td>
<td>0.279*** (0.0957)</td>
<td>0.215** (0.105)</td>
</tr>
<tr>
<td>boho2000</td>
<td>2.434*** (0.469)</td>
<td>2.650*** (0.500)</td>
<td>2.497*** (0.468)</td>
<td>2.467*** (0.453)</td>
<td>2.552*** (0.451)</td>
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</tr>
<tr>
<td>HC2000</td>
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<td>-0.118 (0.106)</td>
<td>-0.139 (0.103)</td>
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<td></td>
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<tr>
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<td>146.4*** (46.17)</td>
<td>128.2*** (45.61)</td>
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<td>-0.125** (0.0558)</td>
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<td>-0.122 (0.0868)</td>
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<td>105.5*** (36.80)</td>
<td>92.45** (36.20)</td>
<td>110.1*** (37.91)</td>
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<td>48</td>
<td>48</td>
<td>48</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.290</td>
<td>0.556</td>
<td>0.570</td>
<td>0.655</td>
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</table>

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

In general, these findings support Florida’s theories that the Creative Class
and the presence of bohemians are important in terms of stimulating a high-tech
industry. However, other variables also appear to be significant, such as Industry
Diversity. While these findings are interesting and supportive of Florida’s theories, I
am skeptical, as the tech-pole only captures the high-tech output for a single year.

Next I investigate how the explanatory variables relate to change in high-tech output
between 2003 and 2007. In this way, I hope to capture which variables are best at
explaining high-tech growth over time, not just the output for a single year.
6. *Tech-Pole Change*

Table 17 below displays the simple regressions I observed when analyzing the relationship between various explanatory variables and economic prosperity as measured by change in the Milken Institute tech-pole between 2003 and 2007:

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<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
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</tr>
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<td></td>
<td>(0.779)</td>
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<td>(9.754)</td>
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<td>49</td>
<td>49</td>
<td>49</td>
<td>49</td>
<td>49</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.002</td>
<td>0.014</td>
<td>0.006</td>
<td>0.025</td>
<td>0.049</td>
<td>0.038</td>
</tr>
</tbody>
</table>

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Interestingly, none of the variables appear to be correlated with change in the tech-pole scores over time. These findings throw into question the conclusions Florida draws about the relationship between his Creative Class theories and high-tech growth. While my previous analysis confirmed that there is a significant relationship between the Creative Class, bohemians, and the tech-pole for a single
year, Florida’s variables do not appear to explain changes in the industry over time.

Figures 29 and 30 explore Florida’s variables:

**Figure 29:**
Creative Class and Change in Tech-Pole Scores

**Figure 30:**
Bohemian Index and Change in Tech-Pole Scores

With regards to the other variables, there appears to be no significant relationship either, again making it difficult to suggest policy prescripts. Below I turn to the full model to examine how the explanatory variables compare to one another.

As Table 18 below demonstrates, even when compared against one another, none of the variables appear to have a significant relationship with changes in the tech-pole scores. In Model 5, Public Provisions do appear to be negatively related at the ten percent level, but the significance disappears in Model 6 once all variables are included. In general, these findings do not support Florida’s argument that agglomerations of bohemians or Creative Class members will spur economic growth in terms of growth in high-tech industries. Unfortunately, no other explanatory variables appear to be significant, making it difficult to draw conclusions about what types of policy are most effective in terms of catalyzing high-tech growth.
Table 18: Full Model Relating Explanatory Variables to Change in Tech-Pole Scores

<table>
<thead>
<tr>
<th>VARIABLES</th>
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<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
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Standard errors in parentheses  
*** p<0.01, ** p<0.05, * p<0.1
V. Discussion and Implications:

The findings of this investigation are mixed, but generally do not support Florida’s Creative Class theories. In this section I attempt to summarize the findings and discuss policy implications for planners and governors.

Part I: What factors attract the Creative Class?

In line with Florida’s findings, there appears to be a significant relationship between the Bohemian Index 1990 and the Creative Class share in 2001, although the significance of the variable drops to the five percent level once all other variables are included. Nevertheless, the finding supports Florida’s theory that agglomerations of artists indicate a creative milieu that is attractive to the Creative Class. In addition, I found the Cultural Provisions Index to be negatively correlated to the Creative Class. This finding may lend support for Florida’s theory the Creative Class is more attracted to an authentic creative milieu than mainstream cultural opportunities. In sum, if policy makers are bent on attracting these members of the Creative Class, investing in the arts may indeed be a good strategy.

At the same time, the Human Capital Index 1990 appears to be a better indicator of the Creative Class share in 2001 than the Bohemian Index, as it is significant at the one percent level in the full model. Perhaps the Creative Class is more attracted to agglomerations of educated people than bohemians. Policy makers may consider investing in educational institutions, universities, or R&D institutes in order to attract creative people.
Part II: What drives urban growth?

While the evidence supports Florida’s theory that areas with a high Bohemian Index attract the Creative Class, it is unclear whether or not this class of individuals is effective in catalyzing economic growth. The results of my analysis provide little support for Florida’s theories. First, there is no significant relationship between the Creative Class or the Bohemian Index and the following indicators of economic prosperity: employment growth, population growth, per-capita income growth, or change in the tech-pole scores over time.

The only measures of economic growth that demonstrate a significant relationship to Florida’s variables are GDP growth and the tech-pole 2007. With regards to GDP growth, the Creative Class demonstrates a very weak positive relationship at the ten percent level, only when all other variables are accounted for. Other variables such as Public Provisions and Cultural Provisions display a stronger relationship significant at the five percent level. Human Capital and Industry Diversity also appear to have a weak relation to GDP growth in the final model. Florida’s Bohemian Index is in no way related.

With regards to the tech-pole 2007, both the Creative Class and the Bohemian Index appear to be strongly and positively related. However, in the full model, the Industry Diversity Index appears to be a more significant indicator of the tech-pole 2007 than the Creative Class. Furthermore, when measuring changes in the tech-pole over time, neither the Creative Class nor the Bohemian Index display any significant relationship. This finding refutes Florida’s assertion that conglomerations of artists or creative people are in some way related to high-tech growth. Policy makers
interested in building up a high-tech economy should be cautioned against following Florida’s prescripts as there is not enough supporting evidence. Unfortunately, the results do not provide strong grounds for alternative policy suggestions with regards to building up a high-tech base.

While Florida’s variables may be weakly related to GDP growth and more strongly correlated to the tech-pole 2007, these findings do not lend enough support for his Creative Class theories, especially given that Florida’s variables display no significant relationship to any of the other measures of economic growth. My findings that the Bohemian Index is neither directly nor indirectly associated with employment growth, population growth, or tech-pole growth directly contradict Florida’s assertions in *Rise of the Creative Class*. Policy-makers should not assume a causal link between investment in the arts and economic prosperity as defined by these indicators.

With regards to the other variables, I observed some interesting trends. Beginning with Human Capital, I found this variable to display no significant relationship to employment growth, population growth, or tech-pole change. Furthermore, Human Capital appears to be negatively related to GDP growth in the full model, although the association is weak at the ten percent level. Human Capital demonstrates a weak positive relationship to per-capita income in the full model. With regards to the tech-pole 2007, simple regressions indicate a strong positive correlation, but the significance disappears when other factors are incorporated in the full model. In general, these findings do not lend support for Glaeser’s theory that agglomerations of Human Capital spur economic growth.
Industry Diversity is not significantly related to population change or change in tech-pole scores. Nevertheless, Industry Diversity has a weak relationship with employment change, but the significance disappears in the full model. With regards to per-capita income change, simple regressions indicate no relationship; however, in Model 5, Industry Diversity appears to have a weak association, although this disappears in Model 6. Industry Diversity demonstrates a highly significant relationship to GDP growth in the simple regressions, although the significance is reduced to the ten percent level once all other variables are included. Industry Diversity also appears to be strongly related to the tech-pole 2007, and is a more significant indicator than the Creative Class when all variables are incorporated in Model 6.

While these results are mixed and unclear, they do lend some support to the idea that industrial composition is important to the economic well-being of a city. Policy-makers should analyze the industrial composition of their cities to determine best-practice strategies; some cities may focus on strengthening particular industries while others may seek to diversify. Most importantly, the results highlight how Florida may be neglecting the role of industrial composition in determining growth in cities. More research is needed to examine the relationships between industry diversity and urban growth in order to provide policy-makers with more concrete conclusions.

On the whole, the Public Provisions Index appears to be negatively correlated with economic prosperity. In Part I, it was found not to be significantly associated with the Creative Class. In Part II, the Public Provisions Index is significantly and
negatively correlated with factors such as employment growth, population growth, GDP growth, and tech-pole 2007. However, it does appear to be positively related to per-capital income growth, though the association is weak at the ten percent level. Overall, these findings suggest that Public Provisions are not boosting the economy effectively, and may even impose a burden or drain on urban regions.

Surprised by these negative findings, I pulled the Public Provisions index apart to investigate how education and health-services independently relate to measures of growth. Again, even when separated, I found that these two variables expressed negative relationships with urban growth. These findings highlight how education and health-services independently appear to be burdening urban economies. Policy makers should seek ways to improve efficiencies and productivity in both education and health-care to prevent these systems from becoming drains. Perhaps cities would experience economic boons if they focused on better supporting these systems so that they became more productive. National policies may also need adjustment in order to strengthen these sectors.

The Cultural Provisions Index has mixed results. In Part I, it is negatively associated with the Creative Class. In Part II, the index is not significantly related to population change, per-capita income change, tech-pole 2007, or tech-pole change. Nevertheless, the index is positively and significantly associated with employment growth in the simple regressions, although the significance falls away when all other variables are included in the full model. Most interestingly, the index is highly correlated with GDP growth, and appears to be the most significant explanatory variable of GDP change in the full model, where all variables are included. These
findings imply that amusement, luxury, and entertainment are growing sectors of the economy. Scatter-plot analysis reveals how vacation destinations such as Honolulu, West Palm Beach, and Orlando are experiencing immense job growth and GDP growth.

While policy-makers may take this as an incentive to invest in amusement, entertainment, and tourism ventures, they should be cautious that such a policy may not work for all cities. Some cities do not have the infrastructure or natural amenities necessary to sustain a strong tourist industry. Furthermore, it may take a long time for a city to build a brand image as a destination location. Finally, the results indicate that areas with a high Cultural Provisions Index have low proportions of the Creative Class and Human Capital, and low tech-scores. Thus, policy makers must orient their development strategies around plans that make sense for the futures of their cities.

On the whole, my findings suggest a positive relationship between bohemians and the Creative Class in Part I, consistent with Florida’s findings. However, Part II complicates Florida’s Creative Class theories. Even if bohemians were to attract a Creative Class, my research indicates that the presence of these individuals does not automatically increase economic prosperity. Furthermore, my findings throw into doubt the direct correlation between bohemians and indicators of economic prosperity that Florida has reported. Overall, these findings suggest that investment in the arts may not lead—directly or indirectly through the Creative Class—to economic growth. Policy makers should be cautious about over-investing in the arts in order to achieve economic prosperity, as the evidence is inconclusive as to whether or not these strategies will be successful.
VI. Limitations and Suggestions for Future Research:

There are several limitations to my study that should be addressed in future research. First, the small sample of the fifty largest cities was problematic in that it failed to investigate how the explanatory variables relate to economic development in smaller cities. It would be interesting to incorporate smaller cities into the study, as oftentimes these cities are more specialized industrially. A more significant association between the Industry Diversity Index and economic growth may become distinguishable if a broader sample of cities is used. Similarly, the arts may play a bigger role in the economies of some smaller cities; a stronger direct association may emerge between the Bohemian Index and economic prosperity if smaller, more arts-based communities are included in the study.

Second, the Industry Diversity Index created in this model is weak in several ways. To begin with, due to missing or unsorted data, I was only able to construct an Industry Diversity Index that classified industries according to the highest level of NAICS aggregation, leaving me with only nine different categories. Such a broad classification of industries may have glossed over more subtle relationships between industry diversity and economic growth. Stronger relationships may become apparent if industries are classified more specifically. Future research should attempt to develop a more detailed index of industrial diversity.

In fact, John E. Wagner & Steven C. Deller critique ‘traditional’ measures of Industry Diversity such as my own, arguing that such measures do not capture the influence of inter-industry linkages on economic development. As a result, “Contrary to ‘conventional wisdom’ the empirical literature has been unable to confirm the link
between diversity and economic performance” (Wagner & Deller, 1998, p. 541). Wagner & Deller constructed an alternative model of industry diversity “based on a regional input-output model” and found that this model “is associated with higher levels of stability and growth” (p. 541). Future research should compare Wagner & Deller’s model of industry diversity to Florida’s Creative Class model in order to determine whether or not one is a better indicator of economic growth than the other.

Furthermore, expanding the comparison to include different time intervals and smaller geographical units would allow for more robust analysis. Limiting the study to the period between 1990 and 2007 does not allow for a historical examination of how different factors have effected economic growth. Examining the relative influence of the different indicators over time might provide more conclusive evidence upon which to base current economic development strategies, as more trends and patterns may emerge. At the same time, economic patterns change quickly. Perhaps studying economic change between two periods ten or seven years apart does not accurately capture the evolution of urban economies. Future research may consider using time-series data or smaller time-periods in their analysis.

Similarly, the geographic unit of analysis could be broken down into more detail. Cities are relatively large units, with vastly disparate industrial and cultural zones. Investigating urban economics on a smaller scale like at the neighborhood level, for example, may help to clarify which parts of the city are more likely to be effected by different economic development strategies.
VII. Conclusions:

Despite the limitations, this exploratory analysis reveals interesting results. Most findings appear to reject Florida’s Creative Class theories. The results should be interpreted as a red flag for policy-makers interested in Florida’s economic development theories. There currently exists a lot of interest in Florida’s policy prescription, and many planners and policy-makers are eager to jump on the bandwagon in hopes of reaping the benefits. However, having analyzed how Florida’s variables relate to different measures of economic growth, I find little to no support for Florida’s Creative Class theories. Overall, my findings weaken Florida’s theories and caution policy-makers from adopting his prescriptions unquestioningly.
CHAPTER 3: Case Studies—Austin & Orlando

While in Chapter Two I explored broad trends and patterns amongst fifty cities, I now turn to two cities of interest—Austin, Texas and Orlando, Florida. Pulling from my own empirical research, I determine how my statistics on these cities inform debates about the role of arts and culture in economic development. Furthermore, I take this opportunity to learn more about the history and development of these cities, and whether or not their stories either reflect or contradict Florida’s Creative Class theories. Through a historical analysis, I gain a better understanding of the characters of the cities, how they evolved economically, and what role arts and culture have played in their social and economic life. My investigations take me further into the politics associated with Florida’s Creative Class theories. Overall, the case-studies complicate Florida’s model of urban development and raise practical, political, and ethical questions.
I. Austin, Texas

As the “poster child” of Florida’s Creative Class theories, Austin, Texas provides the ideal case study (E. J. McCann, 2007, p. 190). Throughout his works, Florida constantly points to Austin as the ultimate success story. Indeed, a glance at Austin’s recent history lends support to the Creative Class theory. Joshua Long, a professor of geography at Mount Holyoke, summarizes Austin’s economic development: according to Long, Austin really began to grow in the 1960s and 1970s when high-tech firms like IBM, Motorola, and Texas Instruments first set up shop in the city (Long, 2009, p. 213). During this time, the number of students at the University of Texas nearly doubled, as did the population of the city. Long describes how the increased number of students generated a counterculture and a vibrant music scene. Through extensive interviews, Long found that many long-term residents “refer to this period as the city’s ‘Golden Age,’ a period when Austin first gained a reputation as a tolerant, bohemian ‘oasis’ in the heart of conservative, red-state Texas” (p. 213).

In the following decades, Austin experienced tremendous growth in the high-tech industry. According to Long, “Austin leaders found that the relatively ‘clean’ high-tech sector appealed to the city’s vocal environmental advocates and local entrepreneurs” (p. 213). In the 1990s during the dot-com boom, employment in the high-tech sector grew by 80 percent, and over 300 companies—mostly tech-related—relocated to the city (p. 213). Long describes how, when the dot-com bubble burst, Austin did not suffer as much as other cities. In fact, he explains that “many in the
tech sector relocated to Austin in favor of low cost of living and quality of life” (p. 213).

Overall, a review of Austin’s economic evolution lends credibility to Florida’s theory about the links between bohemianism, high-tech growth, and urban economic development. Florida consistently upholds Austin as a model for other cities to follow, emphasizing how Austin has “worked hard to develop all 3T’s [Talent, Technology, and Tolerance] of its economic development strategy and build the kind of habitat required to compete and win in the Creative Age” (2002a, p. 298). He emphasizes how Austin has gone to great lengths to improve livability, support eccentricity, and sponsor a thriving music scene. Florida argues that the open and tolerant milieu evident in Austin is a major reason for the city’s economic success.

For the most part, the statistics I collected on Austin tend to support Florida’s Creative Class theories. Beginning with the explanatory variables, the city has the sixth highest Bohemian Index, indicating a strong presence of artists in the community. In addition, the city has an impressive number of Creative Class members. With 37.5 percent of the workforce pertaining to the Creative Class, Austin comes in second only behind Washington DC. In terms of Human Capital, the city comes in fourth, with 22.5 percent of its residents having obtained a college degree or higher. All of these factors point to the city’s ability to attract and retain artistic, creative, and intellectual talent. The city does not rank highly on other explanatory variables, such as Public Provisions, Cultural Provisions, or Industry Diversity/Specialization.
With regards to measures of urban growth, the city’s population grew by an impressive 27 percent between 2000 and 2007, second only to Phoenix. Austin ranks eighth with regards to employment growth, with a 12.6 percent increase in jobs. In terms of GDP growth, Austin has experienced a 46 percent increase, bringing the city into twelfth place. Turning to technology, Austin ranks thirteenth on the 2007 tech-pole, and comes in fifteenth with regards to change in tech-pole score between 2003 and 2007. Overall, the city appears to be above average with regards to most measures of economic growth. Along with the historical review of Austin’s economic evolution, my results generally support the theory that economic prosperity is a direct result of increased livability and quality of life factors, as proposed by Florida. Thus, while overall trends in my empirical analysis do not generally affirm the Creative Class theory, the specific case of Austin does.

Partially as a result of Florida’s work, Austin has become the place many cities aspire to be. While the majority of cities are struggling to repopulate their downtown corridors, Austin’s is thriving: “The downtown is now a shining monument to revitalization and the city streets are packed with the clamor of pedestrians” (Long, 2009, p. 216). The image of downtown Austin is appealing to environmentalists, planners, and policy-makers seeking to curb sprawl, repopulate inner cities, increase quality of life, and spur economic growth. Austin’s rise to prominence as a major global technopolis is also much admired, and envied.

Central to Florida’s theory is his argument that other cities can achieve the same status, if they follow the right prescripts: “New creative centers can emerge and surpass established players very quickly. Recall how quickly regions like Austin and
Seattle rose to the top of the pack within the U.S. The same thing can happen, and is happening, globally” (2002a, p. xxiv). Using Austin as a proto-type, Florida argues that if other cities adopt specific policies aimed at replicating Austin’s urban form, livability, and vibrancy, they may too experience economic boons. As such, Florida turns away from simple observations, and develops formulas and methods for replicating economic success based on the Austin model. It is here that Florida’s theories become exposed to sharp criticism from both practical and ethical standpoints. By more closely examining negative side effects related to the economic evolution of Austin, authors have questioned Florida’s Creative Class thesis.

Returning to a historical overview of Austin’s evolution, critics argue that the picture is not as rosy as Florida paints it to be. While generating massive boons, the rapid burst of growth that Austin experienced also brought burdens. By pointing to the problems of gentrification and sprawl, increased inequality, and loss of ‘authenticity’ in Austin, critics probe the question of whether or not Florida’s Creative Class model is either sustainable or replicable.

**Gentrification and Sprawl:**

As Austin began to grow exponentially, Eugene McCann points out that the first major problems emerged in disputes about land-use. As the city became a technological center, “Austin’s high-tech firms demanded more suburban manufacturing and office sites, while developers built more subdivisions and hilltop mansions west of the city” (2007, p. 189). At the same time, however, McCann illustrates how local environmentalists objected to this outward development and
launched a ‘Smart Growth’ plan to counteract it. Environmentalists and policy-makers alike turned to neighborhoods at the urban core as sites of potential development. As such, the Smart Growth policy catalyzed investment in the livability of downtown neighborhoods, and became a primary policy and economic development focus (McCann, 2007, p. 189).

Nevertheless, while Smart Growth was seen as environmentally and economically favorable by some, for many long-term inner-city residents, it posed a serious threat. As McCann notes, “from the perspective of many residents of these neighborhoods, a number of which are Austin’s poorest places with its highest concentrations of ethnic minorities, the new policy created the opportunity for an externally controlled wave of investment and rebuilding to sweep across their neighborhoods, transforming them in the image of new corporate Austin while decimating long-established communities” (2007, p.192). According to excerpts from her interviews, McCann shows how residents demonstrated a real fear of displacement, as well as frustration with the elite-oriented livability policies: as funding for the music scene became intertwined with economic development strategies, residents expressed resentment that the city was catering to the whims and wills of high-tech workers while ignoring the preferences and needs of long-term residents. Residents also ironically noted the fervor with which environmentalists sought to protect endangered species in the wilderness, lamenting how they had little to no representation in preserving their own inner-city habitats as Austin’s development plans evolved. Overall, as Smart Growth and downtown livability policies increased gentrifying pressures, McCann notes how inner-city residents
expressed more and more “frustration by what they saw as historically rooted class and ethnic inequalities in the city which consistently favored rich, Anglo definitions of livability over poor Latino and African-American definitions” (2007, p. 194).

Ironically, as environmentalists used Smart Growth and livability policies as a means to consolidate the city and prevent sprawl associated with high-tech growth, increased housing prices began pushing the poor further out of the city, thereby reversing the effect. Between 1991 and 1998, the percentage of affordable housing in Austin dropped from 61 percent to 58 percent. This last figure is 8 percent lower than the national average for that year, according to the 2000 Sustainability Indicators Project (McCann, 2007, p. 193). Austin’s city demographer, Ryan Robinson, describes how rising prices have caused erosion in Austin’s historically black neighborhoods since the 1990s: “Over the past 25 years, middle-class African American house-holds have left east Austin for the suburbs” (cited by Long, 2009, p. 215). Not only are poorer groups feeling the pressure, but so are the middle class areas: “Neighborhoods…traditionally viewed as either established middle class or upper middle class areas—witnessed increased property taxes, rising house prices, and a significant influx of new, affluent residents” (Long, 2009, p. 215). As the poor and middle class get pushed further and further out of the city, many residents of Austin fear that the affordability, livability, and character of the city will be compromised.

Many Austinites point to rising cost of living in San Francisco and the sprawling homogenous suburbs of Silicon Valley as a warning for what the city may become. Together, the Bay Area and Austin pose serious questions of sustainability
for Florida’s Creative Class urban growth theories. Throughout *Rise of the Creative Class*, Florida continuously upholds both cities as exemplary models, heralding them as both cultural centers and renowned technopolises. Nevertheless, Florida does not adequately address the problems of sprawl and gentrification that accompanied the rapid burst of growth in each city. The Bay Area preceded Austin in its high-tech boom, and it also was the first to experience the growing pains. Ironically, Long argues that the negative externalities experienced in the Bay Area helped to catalyze the growth of Austin; “Indeed, many of Austin’s new creative residents originally migrated to the city to escape rising cost of living in the Silicon Valley, San Francisco, and Los Angeles” (Long, 2009, p.215). In *Rise of the Creative Class*, Florida recognizes the problems suffered in the Bay Area as it became overwhelmed by the tech-boom. He praises Austin for maintaining its edgy cultural vibe, openness, and diversity, citing these as factors that have allowed the city to pull in migrant creative people from the Valley. Nevertheless, given changes in the Austin metropolitan area since the publishing of Florida’s book, Long argues that Florida’s rosy depiction of Austin and its growth policies read “as an ominous commentary on creative development” (p. 215). The looming question is whether or not Austin will eventually suffer the same losses as Silicon Valley, passing Creative Class members off to the next up and coming city in an endless cycle of rise and fall. While Austin and the Bay Area are upheld by Florida as models of success, cities seeking to emulate their economic development strategies may reap benefits at first, only later to see their efforts compromised by the same problems of gentrification and sprawl.
Increased Inequality:

Another negative side-effect that has accompanied Austin’s rapid growth is increased inequality. As the city has developed, income gaps have widened. Bill Bishop, a columnist for Austin American-Statesman, notes the growing divides: while in 1990 the city’s top decile of earners made 5.7 times as much as the lowest ten percent, by 2000 they were making 11.1 times as much (cited by McCann, 2008, p.12). Bishop argues that the growing gap can have negative repercussions on the productivity of the city: “the rapidly increasing gap between rich and poor can contribute to ill health and crime, economists contend. And the gap could slow economic growth as companies find it difficult to do business in a region where most workers can’t afford to live in most parts of the city” (cited by McCann, 2008, p.12).

While Austin has experienced exponential growth in the past decades, rising inequality threatens to undo or reverse the tide. As low-wage workers—vital to the city’s health—become divorced from access to their jobs, businesses may begin struggling to remain staffed.

Even according to Florida’s own findings, rising inequality is a prominent trend in many creative cities. Cities with the highest concentrations of the Creative Class are also found to be the most unequal; many of the most creative cities are also among the most distressed cities, with high levels of segregation and poverty (Florida, 2002a, p. xv). While Florida briefly acknowledges this reality, he never discusses the economic or political repercussions associated with rising inequality. Instead, he continues to advocate an economic development model focused entirely on one-third of the workforce; the Creative Class. Meanwhile, the other two-thirds of the
workforce—categorized as the Working and Service classes—are delegitimized and portrayed as undesirables. Through correlation analysis, Florida demonstrates that “Working Class centers…have low levels of high-tech industry, innovation, human capital and employment growth.” The Service Class is similarly found to be negatively associated with economic prosperity (Florida, 2002a, p.240).

In essence, two-thirds of the workforce are written off as non-creative and unproductive. Furthermore, as Peck notes, “they are often portrayed as servants of the Creative Class, or stranded inhabitants of ‘hopeless’ cities” (p. 759). Throughout his writings, Florida provides no advice for how to incorporate these other classes into a productive economy. Instead he suggests that cities will only be competitive if they manage to get rid of these workers and attract more of the Creative Class than any other place. Florida argues that cities must focus on attracting the other third; the productive, creative, desirable elite. This economic development model runs counter to his argument that diversity and tolerance are essential to the economic well-being of a place. Furthermore, it ignores both Saskia Sassen and Bill Bishop’s logic that urban economies rely on different, diversified tiers of work in order to remain sustainable. As demonstrated by places like Austin and the Bay Area, over-investment in the Creative Class may result in short-term boom; however, the boom is likely to bust in the absence of necessary lower-wage Working and Service classes.

Storper and Scott argue that the image-based, elite-oriented policies Florida proposes only serve to exacerbate the inequalities by taking attention away from local challenges (p. 165). Peck concurs, suggesting that Florida’s policies are simply a new form of condoned gentrification for a footloose few: “the nascent practices of urban
creativity…provide a means to intensify and publicly subsidize urban consumption systems for a circulating class of gentrifiers, whose lack of commitment to place and whose weak community ties are perversely celebrated” (Peck, 2005, p. 764). Instead of catering to this fickle elite, Hansen and Niedomysl suggest that cities might be better served by cultivating and retaining local talent, thereby strengthening the urban economy from within (p. 202). By encouraging cities to orient policy towards attracting the Creative Class, Florida encourages cities to place other pressing public issues—such as income inequality, affordable housing, or the unequal distribution of public services—on the back-burner.

*Loss of Authenticity:*

A final negative factor critics have noted with regards to Austin’s rapid growth is the loss of the authentic character of the city. Florida continuously praises Austin for its vibrant music scene and happening street-level culture. He argues that the authentic funky character of the city has allowed it to attract myriads of creative people who have subsequently contributed to the economic boom (2002a, p. 299). Ironically as ‘authenticity’ and ‘culture’ have become increasingly important to an economic development scheme, residents worry that these characteristics of the city have become corporatized and compromised.

Through extensive interviews with residents throughout the city, Joshua Long gained a better understanding of how the cultural landscape is evolving in Austin. Long found that many people interviewed “spoke of the city’s ‘soul,’” the loss of ‘weirdness,’” the commercialization of the Austin ‘vibe,’” and the ‘homogenization’ of
the city landscape” (p. 216). As the city becomes more gentrified and increasingly catered to an elite, Long describes how a “hierarchy of authenticity” has emerged amongst bars, restaurants, bookstores, and other venues. Terms such as “Old Austin” or “Austin Originals” have proliferated as places compete to capitalize on the value embedded in romantic and nostalgic images of the city (p. 216).

The concept of ‘weirdness’ in particular is a highly political subject in Austin. Long conducted a case study of the “Keep Austin Weird” movement, which he describes as “a grassroots form of cultural resistance” that has, over time, “turned local business promotion, and later, unofficial civic motto” (p. 215). Digging back to the roots of the movement, Long found that Austin librarian Red Wassenich originally coined the term in 2000 to describe a city he saw as changing. He printed out a thousand bumper stickers and handed them out to friends in an attempt to counter what he saw as increased commercialization in the city. Long described how Wassenich refused to copyright the slogan for idealistic purposes. Nevertheless, the term was soon copyrighted by a local design group—Absolutely Austin. The appropriation of the slogan represents the ultimate commercialization of ‘authenticity’ and ‘weirdness’ in the city. In an interview with Long, Wassenich describes how “I didn’t trademark the slogan for a reason. I wanted everybody to use it…it wasn’t supposed to be held by one group” (p. 216). According to Long, the slogan remains a major income generator for Absolutely Austin, and he describes how “it is hard to go anywhere in Austin without seeing the slogan printed on a bumper sticker, t-shirt, baseball cap, or shot glass” (p. 216).
As ‘weirdness’ in Austin becomes co-opted, residents complain of the “spread of ‘fake’ or ‘slick’ weird” in Austin, further emphasizing how corporate interests have intruded on the authentic character of the city (p. 216). Long notes that longstanding local businesses are struggling to stay afloat as mainstream brands take over. He describes how “the trendy retail chains of creative class consumption (REI, World Market, Pottery Barn, Barnes and Noble, etc.)” are beginning to creep into the city. In addition, he remarks that “outlets like Louis Vuitton, Tiffany’s, Burberry signal the arrival of affluent consumers to the city” (p. 217). Residents worry that the combined forces of gentrification and commercialization are affecting both the physical landscape and the character of the city in ways that are damaging and irreparable.

Given what has happened in Austin, critics wonder whether or not Florida’s use of culture for economic development purposes is sustainable, or even possible. Many critics worry that, by attempting to implement off-the-shelf concepts, cultural authenticity will be lost. Peck warns of the standardization and commodification of the arts, worrying that cultural artifacts will lose their intrinsic value as they are used to market for one class of individuals (p. 249). Malanga similarly criticizes the packaged policy prescripts; “Not only does [Florida] believe that marginal attractions like an idiosyncratic arts scene can build economic power, but he thinks that government officials and policymakers like himself can produce those things artificially” (Malanga, 2004, p. 45). Malanga argues that the very cultural assets Florida points to as models for development are not products of government, but spontaneous developments, and that therein lies their true authentic value (p. 45).
Florida briefly addresses these issues, warning that “the commercialization of experience can empty it of its original creative content.” In addition, he insists that “many Creative Class people are acutely aware of this pitfall. They thus tend to shun the heavily packaged commercial venues that they call ‘generica’…They prefer more authentic, indigenous or organic venues that offer a wide range of options and where they can have a hand in creating the options. Finding such venues can be an ongoing struggle, because generica has a way of creeping in everywhere” (Florida 2002a, p. 187). As such, Florida seems to acknowledge that using culture and the arts for economic development purposes may jeopardize their authenticity. Nevertheless, he offers no comments as to how cities can avoid this type of commercialization. Instead, he continuously urges policy-makers to replicate the street-level culture that appears to be working in his model cities.

Ironically, McCann argues that the commercialization of the Austin character can be partially attributed to Florida’s work. McCann notes that “Austin’s politicians were aware of the emerging creative class thesis long before the publication of Florida’s book and were inspired to adjust policies in line with its argument—aligning cultural policies more closely with economic development priorities” (McCann, 2007, p. 191). The relationship between Florida and Austin is not simply observational; the case of Austin has inspired Florida’s work, but Florida has in turn influenced and shaped how Austin’s economic development policy is framed. Austin and Florida have served to legitimize one another. Consequentially, as the authenticity of Austin’s image is called into question, so too are many of Florida’s Creative Class theories.
In sum, the case of Austin demonstrates how political the marriage between ‘culture’ and ‘economic development policy’ can be. In Florida’s work, Austin is presented not only as the ideal urban success story, but one that can be replicated. By developing formulas and policy prescriptions, Florida urges other cities to cultivate a certain character or culture conducive to growth.

Nevertheless, a closer examination of the full story of Austin’s development reveals a number of negative externalities. Problems of gentrification and sprawl, rising inequality, and loss of authenticity threaten to undo whatever gains Austin has reaped over the past few decades. By failing to address the negative externalities experienced by model cities such as Austin, McCann argues that Florida does a disservice to policy-makers who are “looking to fully understand the range of positive and negative consequences of [his] proposed policy model” (McCann, 2008, p. 15). Florida selectively ignores the problems associated with his model of growth, leaving policy-makers to contend with issues of inequality and gentrification as they emerge. Florida’s policies increasingly look like urban-planning for the elite. The cultivation of urban culture and amenities is designed to attract and serve only the top one-third of the workforce. As such, Florida’s work serves to legitimize the reproduction of exclusive urban forms that, as McCann notes “are becoming increasingly less livable for most people” (2008, p. 1).

As Florida’s policies continue to be implemented across the United States, critics worry that cities will increasingly begin to look like theme parks for the upper-class. Interestingly, by examining the case of Orlando, I find that many critiques of Florida’s work are indeed very similar to critiques of places like Disney World. The
following case-study examines the parallels between how Disney World and Richard Florida have influenced and shaped urban development policy, and implications for the future of urban growth in the United States.

II. Orlando, Florida and Disney World

Originally, my interest in Orlando stemmed from how it consistently stood out throughout my empirical analysis. To begin with, the city experienced the highest percent GDP change between 2001 and 2007, with a 60 percent rise in GDP. Orlando comes in second in terms of employment growth, with a 20 percent rise in employment over seven years. The city is fifth in terms of population growth, with a 23 percent population increase. While the 2007 tech-pole score is average, the city appears to be experiencing rapid high-tech growth: the index representing percent-change in high-tech output shows that Orlando’s tech-pole score increased by 22 percent. This score places the city in the top ten in terms of high-tech growth, higher than places like Austin or San Francisco. In sum, the statistics I gathered on the city demonstrate an economic growth rate that is even faster than Florida’s model cities.

Turning to the explanatory variables, Orlando ranks extremely low in terms of proportions of the Creative Class. With only 27 percent of the workforce falling into this category, the city comes in as 45th in terms of Creative Class share. Similarly, the city has a below average share of human capital. In addition, the city ranks 13th in terms of Public Provisions, suggesting that it has a low proportion of education and health services. Combined, these findings suggest that neither Florida’s Creative Class nor Glaeser’s intellectuals are driving Orlando’s economy.
Conversely, my findings show that the city has a high proportion of artists, as indicated by its position in seventh place with regards to the Bohemian Index, right below Austin. Similarly, Orlando ranks highest in terms of Cultural Provisions, suggesting that it is highly invested in leisure, hospitality, and entertainment. Finally, Orlando ranks as the third most industrially specialized city.

All of these findings make sense given that Orlando is the home of Disney World, SeaWorld, and Universal Orlando Resort. Orlando’s economy is largely driven by the tourist industry, and in some ways represents the ultimate corporatization of American culture. Orlando represents the antithesis to the idealized image of ‘authentic’ Austin. Interestingly, however, a glance at Orlando’s growth statistics demonstrates how the strategy of cultural commodification seems to be successful. Nevertheless, a closer examination of Orlando reveals the negative repercussions of this economic development model. While Orlando has prospered in terms of the standard measures of growth such as employment growth, population growth, GDP growth, and high-tech growth, prosperity has come at a cost difficult to measure in economic terms. Namely, the state of Florida has relinquished controls over land and governance in order to reap the boons from the establishment of Disney World. As the government passes off control to a private corporation, citizens become less capable of using democratic processes to shape their environments, and a number of negative externalities emerge.

By detailing the evolution of Orlando and Disney World, this case-study draws parallels between how both Richard Florida and Disney World have influenced urban development. Drawing from the literature, I explore how both Disney World
and Richard Florida are both critiqued for privatizing urban governance, exploiting natural imbalances of power between cities, and perpetuating systems of exclusion and inequality. Furthermore, the case-study complicates how Florida defines culture and the arts both statistically through his Bohemian Index, and theoretically through his arguments. Combined with the observations from Austin, these investigations demonstrate the power of private interests to capitalize on aspects of American culture and idealized urban environments. I highlight warnings from critics about how such private interests may negatively impact both the future of America’s urban landscapes and the integrity of the arts.

In November 1963, when Walt Disney chose an area near Orlando as the site of his new project—The Walt Disney World Resort—he forever altered the economic, social, and geographic fate of the city and region. Disney World is a vast resort located 21 miles south of Orlando, and covers an area of 47 square miles—more than twice the size of Manhattan Island. The resort includes four theme parks, two water parks, and 23 themed hotels, along with fitness centers and health spas. With more than 66,000 “cast members,” Disney World is the largest single-site employer in the United States (Disney World, 2011). Since the establishment of the resort in 1971, the Orlando region has become the most popular tourist destination in the world. Before opening, central Florida only received about 3.5 million visitors a year. As of 2001, an estimated 55 million people visit the park annually (Foglesong, 2001, p. 3).
In her book *The Cultures of Cities*, Sharon Zukin describes how Disney World catalyzed investment and growth in Orlando: “The theme park brought Orlando subjective legitimacy as a place where businesses and people wanted to be” (Zukin, 1995, p. 61). In his book *Married to the Mouse*, Richard E. Foglesong similarly describes the reverberating effect of Disney World on Orlando; “What Orlando got was the glitz, international name-recognition, and growth bonanza that few corporations besides Disney could offer” (Foglesong, 2001, p. 3). Ironically, Disney World did for Orlando what Richard Florida hoped bohemians and the Creative Class might do for modern cities; attract investment and spur growth. In Austin, this strategy seems to have worked. However, in the case of Orlando, it was the locational decision of a world renowned global corporation that changed the fate of the city. Thus, while Florida argues that the locational decisions of people are now more economically important than those of firms, the case of Disney World proves that companies can still alter regional economics.

A superficial reading of Florida’s statistics—even the high Bohemian Index—may lead one to conclude that it was conglomerations of artists in Orlando that spurred economic growth. However, upon closer investigation of the history of the city, it becomes clear that many of the artists are probably associated with Disney World as part of the 66,000 ‘cast members.’ Disney World employs thousands of actors, painters, singers, and musicians, whose combined force must positively skew the Bohemian Index. With regards to Markusen’s chicken and egg critique, the historical perspective of Orlando’s development reveals that the firm most likely came before the artists, not vice versa.
As such, the case of Orlando highlights many problems and contradictions embedded in Florida’s perception and evaluation of the arts, as captured by the Bohemian Index. In constructing his Bohemian Index, Florida makes it clear that he wants to avoid mass-oriented or ‘elitist’ entertainment, and capture a more ‘authentic,’ ground-level arts scene, as he observed in Austin, for example:

I wanted to distinguish between the smaller-scale, street level amenities and the traditional big-ticket attractions like professional sports teams, museums, the symphony, opera, ballet and other things that cities typically promote to lure people and firms…I found little evidence that big-ticket attractions were very effective at this. Much better were the small things, the things that my focus groups had mentioned—vibrant street life, readily available outdoor recreation and a cutting-edge music scene (2002a, 260).

While Florida hopes to make this distinction, the high value of the Bohemian Index in places like Orlando reveal that artists involved in mass-oriented commerce or big-ticket attractions are not excluded from the index. Thus, in many cases, Florida’s Bohemian Index exemplifies how Americans place a high value on what Florida writes off as commercial ‘generica.’ As places like Austin become increasingly commercialized, Florida’s Bohemian Index will fail to distinguish between the ‘generic’ and the ‘authentic.’ Correlations between bohemians and growth may remain high, even as the authentic character of the city is compromised.

While an investigation of Orlando complicates Florida’s urban growth theories, statistics, and terms, like the case-study of Austin, it also brings up political and ethical critiques. Specifically, the study finds many problematic parallels between the urban visions Florida promotes and those perpetuated by Disney World. While Florida explicitly attempts to divorce himself from this type of corporate urban
development, his practices nevertheless reflect many themes stemming from the Disney legacy. By understanding how private companies like Disney have commodified public space and American culture, we can begin to unravel some of the contradictions embedded in Florida’s theories and practices, and understand the dangers and complexities of adopting these private visions of public urban development. Three major parallels emerge between Florida’s vision and Disney’s production; (1) the privatization of urban governance, (2) the exploitation of imbalances of power between cities, and (3) the perpetuation of systems of inequality and exclusion.

Privatizing Urban Governance:

As large as the San Francisco metropolitan area, Disney World is virtually a city in and of itself, hosting as many as 100,000 visitors every night (Foglesong, 2001, xi). At the same time, however, Disney World is different from any other city in that it is privately owned and exempt from all of the normal rules and regulations. As Foglesong notes, the Disney Company is authorized “to regulate land use, provide police and fire services, build roads, lay sewer lines, license the manufacture and sale of alcoholic beverages, even to build an airport and a nuclear power plant. To the envy of other developers, Disney also won immunity from building, zoning, and land-use regulations” (p. 5).

Indeed, Walt Disney’s resort is more than just an amusement park. It is an experiment in alternative forms of urban design and development. Walt Disney was not just an entertainer, he was an urban planner and visionary, open to radical new
urban forms and strategies. His pursuit of the ideal city is highlighted in a film showcased after Walt Disney’s death in 1967. Here Walt Disney famously stated “I don’t believe there’s a challenge anywhere in the world that is more important to people everywhere than finding solutions to the problems of our cities” (Foglesong, 2001, p. xi). Recognizing Disney World as an alternative urban model, Foglesong remarks that, “beneath the glitter and all the futuristic imagery, [the Disney Company] offered a governance solution to ‘the problems of our cities’” (p. xii).

The resort is founded on the ideals of privatization and de-regulation. Because the private company owns and manages all of the public utilities, security forces, and sanitation services, the area is safer and cleaner than in any real city.

Given the effective maintenance of such a vast area, Zukin wonders “Has Disney World been, all along, a not-so-subtle argument for privatizing public space?” (p. 55).

Similarly, Foglesong argues that the case of Disney raises the question of “whether the whole business of city building and municipal service provisions should be entrusted to a private corporation instead of elected political officials” (p. 12).

Foglesong studies how Disney thrives on centralized land-ownership and private government, emphasizing how Walt Disney and his colleagues considered elected officials and property rights ‘problematic’ (p. xii).

How does Walt Disney’s model of urban development relate to Richard Florida’s? Florida repeatedly and emphatically juxtaposes his ideas of culture, the arts, and urbanism against the mass-oriented, commercialized projects like Disney. As demonstrated above, he even argues that the Creative Class is repelled by ‘generica,’ and that commercialization of culture is not conducive to economic
growth. Indeed, the case of Orlando, with its low Creative Class population, seems to support Florida’s view that the Creative Class is not attracted, but actually repelled by commercialized cultural forms. Thus—at least theoretically—Florida is not similar to Disney in his conceptualization of culture, bohemianism, and the arts, although statistically his Bohemian Index fails to make a true distinction. However, the argument here is that, while Florida makes distinctions between his type of ‘culture’ and that of Disney World, he nevertheless adopts a similar business model to Disney; that of attempting to privatize urban policy.

Florida has been critiqued for making a business out of consulting cities; he is accused of selling packaged urban policy whose effectiveness is at best uncertain, at worst, detrimental. Jamie Peck offers the most severe critique of Florida in this vein in her article *Struggling with the Creative Class* (Peck, 2005). Peck describes the vast and profitable business that Florida has built up around his Creative Class theories. To begin with, Florida increasingly rakes in speaking fees in the five-figure range as he travels amongst cities eager to hear his policy prescriptions. Florida has since assembled a whole machinery to aid his cities, including a consulting agency called Catalytix which issues city-specific standard format reports for $495, analyzing the creative health of one’s city (Peck, 2005, p. 747). His website, creativeclass.com, offers tools by which cities are ranked on anything from the number of singles to the number of gays. Peck notes how cities have begun to compete for better positions on Florida’s rankings. The competition to improve rankings has provided cities with a means for justifying certain types of investments, including investments in Florida’s advice. For example, in efforts to improve its ‘creativity standing,’ Providence, Road
Island has “enlisted the support of Catalytix in fashioning a local strategy” (p. 749). Thus, by privatizing and commercializing public policy, Richard Florida has in some ways emulated the business strategies of Walt Disney, where public governance is subordinated to private enterprise.

Some observers may wonder whether or not Florida and Disney strategies are for the better. Perhaps all urban systems should be privatized as in the case of Disney World, which has proved exceedingly efficient and functional. Maybe all cities should adopt policies recommended by an elite group of experts like Florida. As Foglesong notes, the case of Disney World (and, as I argue, also the case of Richard Florida) raises serious questions about the future and direction of our cities: “Is the Disney model of centralized land-ownership and private government best, or is the status quo of democracy and capitalism a better arrangement?” (p. xii). Many communities in America might argue for a Disney-type model, and—as Zukin notes—many have replicated versions of this model by developing Business Improvement Districts, neighborhood coalitions, or home-ownership coalitions (p. 66). These bodies voluntarily tax themselves in order to provide services that are not adequately provided by the government. These coalitions can be very helpful for communities, whether by improving anything from maintenance to schools. Oftentimes, however, these coalitions are most interested in preserving and improving property values, or ensuring a degree of exclusivity and social homogeneity. As urban theorist Michael Sorkin states, the main agendas of these coalitions are “to maintain property values, to police levels of otherness, secure the physical character of the place, and to supplement and evade normal democratic legality” (p. 16). As
such, while private government and centralized land-ownership may be efficient and
effective, they also perpetuate inequality and exclusion and enforce systems of
privilege and social hierarchy.

Exploiting Imbalances of Power between Cities:

Another way in which Richard Florida’s business model resembles Disney World is in his exploitation of the power imbalances between cities. By exploring how corporations like Disney World can pick and choose between cities depending on concessions these cities are willing to make, we can understand how Florida’s Creative Class business similarly pits urban areas against one another.

Originally, Walt Disney had plans to locate his resort in St. Louis. However, the deal fell through when a leading businessman, August (Gussie) Busch, Jr, made an offensive remark at a decisive dinner party. Mr. Busch objected to Walt Disney’s demand for the control of liquor licensing in the Disney resort, remarking that “Any man who thinks he can design an attraction that is going to be a success in this city and not serve beer or liquor, ought to have his head examined” (Foglesong, 2001, p. 2). Offended by the challenge, Disney dropped the St. Louis deal. Soon after, he chose to develop near Orlando, inspired by the freeway network that provided the necessary access infrastructure. Orlando did not challenge his policies and gave him the political autonomy and freedom he demanded. Consequently, the city ‘won’ Disney.

While Disney World greatly accelerated Orlando’s economic development, Foglesong points to the downsides of the relationship. To begin with, Orlando
appears to be locked into a service-oriented, low-wage economy. As Foglesong notes
“In the Orlando area, over half the metro workforce is engaged in the service and
retail sectors…” (p. 12). The high presence of bohemians has not attracted Richard
Florida’s anticipated Creative Class: as my research demonstrated, out of my 50
cities, Orlando ranks 45th in terms of proportions of the Creative Class. Instead,
Orlando seems to be caught in a service-dependent economy centered on tourism and
entertainment. As Zukin notes, “One of every four jobs is tourist related…Despite
the comfortable lifestyle that Orlando represents, most of these jobs are neither secure
nor highly paid” (p. 63). In observing the effect of Disney on Orlando’s economy,
Foglesong states that “some say it is Disney that snared Orlando, not the other way
around” (p. 5). Foglesong uses the Disney-Orlando example to highlight a larger set
of questions regarding the relationship between private corporations and cities. He is
concerned with “the power of global corporations over local governments and,
realistically, whether leaders can resist corporate demands” (p. 10). He issues the
following warning:

This corporate trend bodes ill for local government, it is said. Global
corporations are essentially stateless, having little local or national loyalty.
Global in their operations, footloose in their loyalties, they play one political
jurisdiction against another in bargaining for lower taxes, less regulation,
subsidized infrastructure, and more. The result: local governments become
interchangeable parts in a global game of corporate survival (p. 10).

The main question here is how much power governments have over their own local
policies. Some cities need businesses more than others, a situation which creates
unequal bargaining grounds between cities: some can ignore business offers while
others—more desperate—are forced to make large concessions (Foglesong, 2001, p.
9). Inevitably, some cities are winners and some are losers, leading to the natural uneven distribution of profitable industries and human capital in urban, regional, and national landscapes. This uneven distribution is the by-product of a capitalist system, where prosperity is subject to competition and the market.

There is nothing inherently wrong with global businesses exploiting the power-imbalances between cities in order to achieve the most profitable arrangement. However, what is problematic is when corporations become so powerful that they overwhelm and supersede government bodies in decisions concerning the public good. For example, Foglesong describes how Disney World sometimes abuses the governance powers and autonomy it managed to extract from its economic development deal with the state of Florida. In the government charter, the state granted Disney “government powers (exceeding Orlando’s) and immunities (exceeding other developers)” (p. 124). Consequently, Disney can “decide when to be public and when to be private” (p. 124). In a particular case described by Foglesong, Disney “dons their public hat to win tax-free revenue bonds to support their hotels, using bond money that area governments wanted for affordable housing” (p. 124). Here, we see that the case of Disney can be problematic in that the company sometimes chooses to take control of powers meant to belong to elected, community-oriented public officials. In this way, large global corporations can overextend their powers to disrupt the local governance procedures, thereby undermining democratic freedoms in favor of commercial profits.

While Richard Florida in no way has the ability to exert the same degree of influence over local policy as companies like Disney World, critics highlight how
Florida does take advantage, and perhaps abuses, the natural imbalances of power between competing cities. McCann describes how Florida’s theories are dependent upon a “moral geography of good and bad places” (2008, p.9). She notes how Florida develops an “inter-urban geographical imagination [that is] frequently framed in terms of hierarchies or rankings that: (1) identified cities where positive or negative lessons about urban planning could be learned and (2) highlighted cities to be competed against for investment” (p. 9). Having set up this hierarchical system, Florida then develops a policy prescripts aimed at ‘fixing’ struggling cities. Urban theorist Jamie Peck notes that Florida attempts to sell the same urban policy script to all cities, regardless of their size or status. While Florida writes some cities off as ‘hopeless,’ for the most part, he has captivated countless other cities seeking effective development solutions. “These aspirant cities are Florida’s audience, and his market” (Peck, 2005, p. 747). Peck describes Florida’s business as a sort of medical enterprise, where Florida and his consultants conduct a ‘creativity check-up’ followed by ‘diagnostic testing’ followed by a ‘treatment regimen’ that is prescribed by ‘therapists and specialists’ like himself (p. 748).

Peck worries that many cities are simply being ripped off. He describes Florida’s prescriptions as fast policy, illustrating how cities are fruitlessly scrambling to achieve a competitive advantage by attracting a limited number of creative people, using the same ‘creative’ policies as every other city. Peck describes how “investments in the ‘soft infrastructure; of the arts and culture are easy to make” and “the long list of cities that have signed up for treatment only reinforces [Florida’s] message” (p. 749). However, Peck, like many other critics, remains unconvinced that
these policy prescriptions will result in effective long-term economic development. Similarly, economists Stephen Rausch and Cynthia Negrey worry about vulnerable cities; “Cities with poor market conditions and weak local cultures will undertake nearly anything that smacks of ‘development.’ Cities with good marketing conditions and strong local cultures can be more selective in what constitutes effective development” (Rausch & Negrey, 2006, p. 3). In sum, critics worry that Florida is exploiting power imbalances between cities for economic gain, without being truly invested in strengthening local economies.

Perpetuating Systems of Exclusion and Inequality:

One salient characteristic of Disney World is how it idealizes urban space and its occupants. As mentioned, Disney World is much more than an amusement park: it represents an idealized form of urban society, design, and governance. In the resort, people expect to feel safe, have fun, and be entertained. Socially, Zukin argues that “The theme park is a tightly structured discourse about society…It represents a collective image of what modern people are and should be” (p. 55). Several aspects about the park ensure that people live this ideal experience. First, the hefty $82 entry fee instills a sense of safety in visitors as it implicitly guarantees the exclusion of threats encountered in the ‘real world’ (p. 66). Second, Zukin describes the behavioral norms and dress rules that ‘cast members’ must adopt, noting how these “social strategies have the political effect of creating an impression of trust among strangers” (p. 65). Third, the architecture and experience of Disney World function in a way similar to television. Zukin observes how “space was designed as though
never to be seen by the human eye, only by a camera—either a director’s movie
camera or a tourist’s VCR” (p. 58). In a way, Disney World allows people to move
through a three-dimensional version of television. The visual coherency of Disney
World ensures that visitors are steadily bombarded with stimulus, guaranteeing that
they are constantly entertained and catered to. Together, the different strategies
employed by Disney World allow people to escape the dangers and uncertainties of
the real world and experience life as a fantasy.

While people usually only ‘escape’ to Disney World for a few days, there also
exists the opportunity to live nearby permanently: Disney has designed and built a
residential community called Celebration that is linked to the resort. Originally, Walt
Disney had intended to build EPCOT; the Experimental Prototype Community of
Tomorrow. His vision was to create a city “…like the city of tomorrow ought to be.
A city that caters to the people as a service function. It will be a planned, controlled
community, a showcase for American industry and research, schools, cultural and
educational opportunities” (Disney). While EPCOT never came to fruition as a
residential center, it was incorporated as a theme park in the Disney resort.
Nevertheless, many of the plans for EPCOT were later incorporated into the
community of Celebration, which was developed during the 1990s. Celebration is a
residential community that was originally developed by The Walt Disney Company.
Development began in the early 1990s, and Walt Disney World still operates the
companies that provide the public services to the town. Celebration currently has a
population estimated at over 11,000, and is directly connected to the Walt Disney
World Resort via World Drive which begins near the Magic Kingdom.
Celebration is an idealized society imagined by Walt Disney. However, a simple glance at the demographics reveals that only particular types of people live in this place. Census 2000 data indicates that 93.7 percent of the population is white, 1.72 percent of the people are black, 2.4 are Asian, and the rest are ‘other.’ In 2000 the median household income was $74,000, 56 percent higher than the national median household income of $42,000. In sum, Celebration is a community of middle-class to upper-middle-class white people. This community replicates, and to a certain extent idealizes, a white suburban landscape where the exclusion of racial minorities is the norm. Celebration unquestioningly perpetuates urban systems of inequality and exclusion. Given the history of white flight and racism in urban America, idealizing communities like Celebration is highly problematic.

Furthermore, Zukin describes how both Disney World and Celebration have influenced the growth and shape of other places, like the planned community of Seaside, Florida. In these places, people are willing to accept “an internalized political authority” in exchange for a particular “visual criteria” (p. 64). Regulations control the form and shape of the built environment, ensuring that it conforms to a particular image. As Zukin notes, places like Disney World and Celebration “reproduce the white middle-class exclusivity—the safe, socially homogeneous space—of the 1950s, within acceptable limits of aesthetic diversity” (p. 64).

How are Disney World and the community of Celebration related to Florida’s Creative Class and models for economic development? Florida attempts to promote an urban environment antithetical to places like Disney World and Celebration. He advocates diversity, inclusiveness, and authenticity. Nevertheless, as demonstrated
by the case-study on Austin, further investigation into Florida’s work reveals that his policy prescripts mainly serve the elite one-third of society. By analyzing how certain aspects of his script demonstrate strong parallels to those of Disney World’s, Florida’s policy prescripts are further questioned. Florida’s urban policy is similar to that of Disney’s in two major ways; (1) by idealizing urban forms, and (2) by catering to an elite portion of American society.

Like Disney World, Richard Florida’s ideal urban world is a form of spectacle. People must be able to move through a city that conforms to a particular aesthetic. With regards to design, Florida asserts that all cities must focus on creating and replicating a particular type of urban scene: “It is not just a scene but many: a music scene, an art scene, a film scene, outdoor recreation scene, nightlife scene, and so on…My interview subjects tell me that this kind of ‘scene of scenes’ provides another set of visual and aural cues they look for in a place to live and work” (Florida, 2002a, p. 183). Like Disney World, the real world must be a place of constant stimulus and entertainment. Florida suggests that the following street-level elements have been successful in promoting the type of engaging street-level culture: “These may include coffee shops, restaurants and bars…art galleries; bookstores and other stores; small to mid-sized theaters for film or live performance or both…” (p. 183). Nevertheless, critics argue that these elements have become so prevalent throughout urban America that they have lost authenticity. Urban theoretist Michael Sorkin notes how “Virtually no town of any size now seems to lack zones replete with sidewalk cafés, street trees and furnishings, contextually scaled architecture, artistic shop fronts, loft living, bike paths, and other elements from the urban design pattern book”
While Florida emphasizes that each city must develop its own unique assets, his policy recommendations are usually the same. Authors like Sorkin and Zukin worry that policies like Florida’s—through replication and copying—may have the effect of Disneyfying the American landscape, where life is experienced as if one were moving through a highly stimulating, interactive, three-dimensional television set.

Second, Richard Florida not only idealizes urban forms, but—like Disney World, his cities are meant to cater to a specific elite group of people. In Florida’s case, urban policies are aimed at attracting and entertaining the Creative Class. While his tactics may be different from Disney’s, the idea is the same; cities—and the people in them—must cater to the tastes of an elite. Particularly problematic is Florida’s attitude towards diversity: he promotes diversity as a form of entertainment. In *Rise of the Creative Class*, Florida describes an ideal urban setting: “The first thing that strikes you is the sheer visual variety of the people…It is similar to the thrill of a costume party, when people literally put on new identities—including masks that obliterate or alter the social ‘masks’ they normally wear, and there is a delicious sense of adventure in the air. One has the awareness of the possibilities of life” (p. 186). Here, diversity is promoted on the basis of aesthetic appeal to a particular elite. People that represent diversity—whether ethnically, racially, sexually, or aesthetically—are expected to perform a particular role in society that conforms to the ideal vision of the Creative Class. Notably, they are expected to represent openness and tolerance. This idealization of minority groups clashes with certain observed, historical realities, where minorities are not necessarily open and
tolerant, but fiercely opposed to the status quo. As such Florida’s understanding of diverse groups and the values or ideals they represent is both limited and disenfranchising.

Overall, by idealizing urban form and catering to the tastes of a specific elite, both Disney World and Richard Florida promote urban policy that perpetuates systems of exclusivity and inequality. The case of Disney World and EPCOT demonstrate how private interests can extract concessions from local government in order to develop idealized, exclusive communities catered to the tastes of the white upper-middle class. Florida similarly promotes public policy as the instrument of an elite Creative Class. Such elitist, private-oriented approaches to public policy only reinforce ingrained systems of privilege, thereby exacerbating longstanding inequalities.

Together the case-studies of Austin and Orlando highlight serious practical, political, and ethical problems embedded in Florida’s Creative Class theories. These studies expose negative externalities associated with his theories, provoke questions about the sustainability of his model, and highlight political and ethical contradictions embedded in both his theories and practices. What makes Florida confusing is his simultaneous acknowledgement of the pitfalls of his theories, and his steadfast promotion of his them. For example, Florida acknowledges that “there is no one-size-fits-all strategy” with regards to proper cultural or economic development policy, yet at the same time he continuously urges cities to adopt the same agendas. With regards to the problems of inequality and exclusion, Florida is the first to point out
that “inequality is highest in the creative epicenters of the U.S economy” (2002a, p. xv). Nevertheless, Florida never suggests any ways policy-makers can address these issues, and instead continues to promote policies that might exacerbate them.

Florida’s work embodies the complexities and contradictions encountered in the relatively new practice of assigning economic value to cultural assets and of linking cultural policy to urban growth strategies. Most significantly, the case-studies reveal the importance of complimenting broad empirical analysis with in-depth investigations into the historical evolution of particular cities. From an empirical standpoint, not only do case-studies provide the means to explore cities that stand out in the empirical analysis, but they also provide a platform from which to reflect upon the imperfections, contradictions, or assumptions embedded in broad-based empirical analysis, and correct for some of them in the future. From a practical, political, and ethical standpoint, case-studies allow for an in-depth review of both the positive and negative repercussions associated with a specific economic development model. As researchers continue to probe broad links between arts, culture, and economic growth, the experiences of individual cities should be studied. In this way, researchers may observe and capture factors which may not be quantifiable or visible in the empirical analysis.
CONCLUSION:

This thesis has explored how viewing culture and the arts through the lens of urban economic development can inform cultural policy in cities. While economics and statistics can provide new tools that can validate and legitimize increased public support and funding for the arts, developing methods to evaluate the impact of the arts has proven to be complex and highly political. By examining how Richard Florida has attempted to develop an economic framework through which to validate the arts, some of these complexities have been revealed. Along with other critics, my research has exposed contradictions in both Florida’s empirical and theoretical models.

The literature review in Chapter 1 highlighted the technical and conceptual critiques that Florida’s work has sustained from other critics. Technically, Florida’s work is criticized for being over-simplistic in his reliance on correlations and ranking systems, vague in his use of terms, and unclear with regards to the direction of causality in his models. Conceptually, Florida is critiqued for his lack of attention to the history of cities and their position in larger regional, national, and international systems of economic production. Furthermore, Florida is critiqued for his assumption that the Creative Class is highly mobile. Together, the technical and conceptual
critiques highlighted in the literature review should inform how future studies on this topic are directed.

In Chapter 2, I addressed the lack of clarity and directionality in Florida’s empirical models and I developed a model to test his theories and findings. As discussed in Part I, I found supporting evidence that the Bohemian Index is correlated with higher proportions of the Creative Class, suggesting that investing in the arts may indeed be a way for cities to attract these types of individuals. Nevertheless, in Part II, I found little to no supporting evidence that either the presence of bohemians or the Creative Class leads to urban economic growth. My empirical results raise questions about whether or not Florida’s Creative Class model is effective, and caution policy-makers from blindly adopting Florida’s prescripts. In addition, I develop alternative indexes such as the Industry Diversity Index, Public Provisions Index, and Cultural Provisions Index against which to test Florida’s indexes. As discussed, I find interesting patterns among these indexes and their relationships to the different measures of urban growth. These findings are significant for policy makers seeking to better understand what factors catalyze or hinder urban growth. I point to how future research can further explore these findings, building off of the work presented here while avoiding some of the limitations highlighted.

Finally, in Chapter 3 I delve into the case-studies of Austin and Orlando. The case-studies raise more questions about both the statistical and theoretical framework Florida has developed, and point to practical, political, and ethical concerns embedded in his work. As a proto-type for the Creative Class theory, the case-study on Austin is helpful in highlighting the negative externalities that may be associated
with Florida’s model of urban development. Not only does the case-study on Austin raise questions about the practicality or sustainability of Florida’s model, it also highlights concerns with the elitist orientation of his policy prescripts. Subsequently, the case-study on Orlando draws comparisons between Florida’s urban visions and those of theme parks like Disney World. This case-study raises the issue of how urban policy can become privatized by the self-serving elite, and raises questions about the future and direction of urban development in America.

Together, the studies in Chapter 3 inform policy-makers of the potential negative repercussions of adopting Florida’s prescripts. In addition, they highlight the importance of complimenting empirical analysis with case-studies. First, case-studies allow for a historical analysis of the economic development of cities that helps to determine what processes spur economic growth, thereby affirming or negating the hypothetical causal model imposed in the empirical analysis. Case-studies can help to highlight inconsistencies embedded in empirical models, and perhaps inform their future design. Second, they serve as an instrument for capturing negative externalities and theoretical inconsistencies that may be difficult to quantify.

Overall, a key finding in this thesis is that defining a relationship between economics, arts and culture, and growth in cities is a very complex and highly political process. While Florida attempts to use economics to make objective statements about how American cities should develop culturally, his visions and definitions of arts and culture inevitably stem from a particular viewpoint or bias. Whether or not it is backed by hard facts and statistics, upholding a particular vision
of American culture as the most successful vision can quickly become problematic. As Sharon Zukin notes, “Culture is a powerful means of controlling cities. As a source of images and memories, it symbolizes ‘who belongs’ in specific places” (p. 1). As demonstrated, Florida favors an urban culture where members of the Creative Class—such as himself—belong. Florida has used the language of economics to help sell policy scripts aimed at developing this elite-oriented urban cultural milieu.

Given the complexities and inevitable biases that emerge in attempting to develop a case for the arts grounded in economics, some wonder if it is even worth it. Is the value of culture too difficult to define, too subjective, and too easily co-opted by private interests to be subject to economic analysis? In his book titled The Economics of Cultural Policy, author David Throsby wonders “Should I have followed Rothfield’s lead and appended a question mark to the book’s title?” (p. 234).

While the business of assigning economic value to the arts and their impact on cities is complex, Throsby defends the effort, arguing that the economic value of culture—however defined—must be recognized by economists (p. 235). At the same time, Throsby suggests that the economics of cultural policy be influenced by multiple disciplines. Cultural policy, Throsby argues, should be informed by “an economics that is flexible, open-minded, and receptive to the intellectual influence of other disciplines in the social sciences and humanities” (p. 235).

As Throsby notes, cultural policy is being pulled in many directions: “There are at least half a dozen wonks, coalitions of corporate or bureaucratic power, and gatherings of ivory-tower theorists that can be identified, all with their own agendas for the onward direction of the cultural policy caravan” (p. 235). In order to avoid
this dilemma, the process of inventing cultural policy must be democratized and
reclaimed by the public. As Miller and Yudice note, “Getting to know cultural policy
and intervening in it is an important part of participating in culture” (Yudice, 2002, p.
34). As efforts to define the future of cultural policy move forward, different interest
groups should become actively engaged in formulating and producing cultural
policies that meet their needs.

As the world becomes increasingly globalized and the exchange of artistic and
cultural objects or representations accelerates, assigning economic value to the arts
will become more and more important for cities. Along with other economists,
Richard Florida has pioneered attempts to evaluate the economic impact of arts and
culture on urban regions. Florida’s work has sparked immense debate amongst
scholars, planners, and policy-makers. He has catalyzed important discussions about
the role of culture, the arts, and quality of life in the futures of cities. Despite its
limitations, his research lays the groundwork for future explorations in this field. By
deconstructing his model via rigorous empirical testing and the exploration of case-
studies, this thesis has highlighted the empirical and political complexities associated
with assigning economic value to the arts and linking it to urban growth. These
critiques should be used to guide how future empirical analyses are constructed, and
how they can be supplemented by case-studies to inform sound, fair, and effective
cultural policies for cities.
Works Cited


