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Business Improvement Districts: Should Lexington Establish One?

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EXECUTIVE SUMMARY

Downtown districts are falling victim to surges of new development increasingly taking place outside the city as people seek to escape fast-paced city life for a more peaceful life in the suburbs. As people move to the suburbs, they either take the businesses with them or the businesses fail to maintain profitability in empty downtowns. Downtown Lexington has been no exception. The recent developments of Hamburg Place and, more recent the developments around Fayette Mall have attracted even more business owners away from downtown.

A new implementation approach for revitalization is gaining momentum, as downtowns are introducing policies that enable Business Improvement Districts (BID). In this approach to revitalization, property owners in a district file a petition to impose an additional assessment on themselves. This assessment is used to provide services supplemental to services being provided by the city government. Most BIDs seek to promote the economic development of downtowns, while providing services such as maintenance, street cleaning, security, marketing, and special events.

This report seeks to determine if the establishment of a BID has an effect on businesses in downtown districts, while also examining the issue of whether or not Lexington should establish a BID. To determine this, I have analyzed data from the Economic Census Zip Code Business Patterns. I conducted both a two-sample t-test with equal variances and a difference in difference regression to estimate if there was a statistically significant difference in the means of BID and Non-BID cities pre and post-BID establishment for the average annual growth rates for number of establishments, number of employees, and average payroll.

The studies both failed to estimate that there is a statistically significant difference in the means of BID and Non-BID cities pre and post-BID establishment for the average annual growth rates of number of establishments, number of employees, and average payroll. However, there was a low variance in the difference of the BID cities and the Non-BID comparison cities, meaning that the cities were well matched. Based on my analysis, I would recommend further study of BIDs before establishing a BID in Lexington, perhaps using these same cities, but examining the sales tax receipts or the type of business establishments might provide a better analysis of the impact that BIDs have on businesses.
INTRODUCTION AND BACKGROUND

The revitalization of downtowns has been a widespread trend across cities in the United States. However, it is not a new issue, according to Mitchell (2001), it has just taken a new implementation approach in recent years. Downtowns are falling victim to new developments on the edge of towns and people moving to the suburbs to escape the city. Currently, downtown Lexington is competing with new developments like Hamburg Place, the recently developed area around Fayette Mall, and Brannon Crossing for business. In response, cities throughout the United States, and even the world, are creating special districts, commonly known as Business Improvement Districts (BIDs), to revitalize downtown districts. Garodnick (2000), believes that BIDs serve an essential function in municipal government. According to Levy (2001), “BIDs seem to make our cities livable and competitive again” (p. 125). BIDs are gaining the attention of business and property owners, city officials, and downtown organizers, including Renee Jackson, Executive Director of the Downtown Lexington Corporation, who introduced me to the concept of BIDs. They are seen as the solution to revitalizing downtown by many and some argue this will be important for the success of the World Equestrian Games in 2010.

Kentucky Legislation

BIDs are authorized by state legislation, so it was important to look at Kentucky’s legislation concerning BIDs. Kentucky’s legislation allows for the creation of management districts, which is another name for business improvement districts. KRS
91.750 subsection 4 defines a management district as “an area designated by a
legislative body pursuant to KRS 91.750 to 91.762, that is to be benefited by economic
improvements and subjected to the payment of special assessments for the costs of the
economic improvements” (2005). The statue defines special assessment as “a special
charge fixed on property to finance economic improvements in part or whole” (KRS
91.750, 2005). It also explains that designated areas may include, but are not limited to,
neighborhoods and business districts (KRS 91.750, 2005).

Kentucky is no different from other states in the fact that a petition is required in
order to establish a BID. A petition must have “signatures and addresses of at least
thirty-three percent (33%) of the owners of real property within the proposed
management district and a number of real property owners, who together are the
owners of real property equal to at least fifty-one percent (51%) of the assessed value of
property within the proposed management district” (KRS 91.754, 2005). According to
the statute a petition is also required to have an accurate description of the boundaries
of the proposed district, an economic improvement plan, and the proposed makeup of
the board of directors. While the petition has certain criteria, the ordinance has far
more criteria.

An ordinance establishing a management district, according to KRS 91.756, must
include a description of the geographic boundaries, description of economic
improvements, approval of the annual budget by the legislative body of the city in which
the BID will be in, as well as a copy of the economic improvement plan, the method of
assessment and collection, a method of assessing annual increases, organizational structure of the board, and any other provisions the legislative body deems necessary for implementation. It is important to note that the statute also states the legislative body cannot decrease the level of publicly funded services that were provided prior to the establishment of the district, unless services are decreased throughout the whole city at the same time. This is important because the amount of publicly funded services will remain the same, so there is a benefit of establishing a management district.

The criteria for establishing a management district in Kentucky are rigid. However, there is some flexibility in the manner the assessment is collected. According to KRS 91.758, the board of directors may bill and collect the assessments or it may be collected by the city in the same manner they collect taxes and then make payments to the board of directors.

The board of directors of a BID must be made up of property owners, representatives of property owners, and tenants within the district, as well as designated ex officio members according to KRS 91.760. This statute also points out at least two-thirds of the board must be property owners or representatives of property owners within the district. This is important because it allows a majority of the people affected by the BID to have a say in the management of the district.
**Louisville Downtown Management District (LDMD)**

The city of Louisville established the first management district in the state of Kentucky, establishing a management district for a sixty-one block area of the central business district in 1991 to advance the economic development of businesses and the residential vitality of downtown (“Louisville Downtown,” 2008). The mission of the LDMD mirrors the mission of most BIDs.

The LDMD has a streetscape program that is a vital part in marketing downtown Louisville. This project has done everything from designing and placing newspaper corrals and trashcans to having local artists design unique bike rack sculptures and benches (“Louisville Downtown,” 2008). Not only did this project seek to beautify downtown, but it also created and placed 28 information kiosks and 125 pedestrian signs on the corners of intersections listing all businesses on that one block area (“Louisville Downtown” 2008).

It is important to point out the LDMD is “committed to fulfilling its primary responsibilities to its rate payers by maintaining its private, independent, non-political status” (“Louisville Downtown,” 2008). The LDMD is the only example of a management district (BID) that I found in the state of Kentucky.

**Downtown Lexington**

Currently, downtown Lexington has two operating organizations to promote the downtown area: the Downtown Lexington Corporation (DLC) and the Downtown
Development Authority (DDA). The mission of the Downtown Lexington Corporation is “To promote Downtown as a unique and vibrant place in Lexington for business, residential life and entertainment” (“Downtown Lexington,” 2008). According to the DLC website, the DLC operates as a membership organization with more than three hundred members ranging from large and small businesses to churches and neighborhood groups. The DLC considers downtown Lexington to be the area West from Midland Avenue to Newtown Pike and North from High Street to Short Street (R. Jackson, personal communication, March 24, 2008).

While the DLC promotes responsible economic development in Lexington, another agency, the DDA, promotes and assists in facilitating developments in the downtown area. The DDA was established as part of a revitalization initiative and was formally established in 2001 (“Lexington Downtown Development,” 2008). Neither of these downtown organizations operate as a BID, like the Louisville Downtown Management District.

**RESEARCH QUESTION**

The research question I am seeking to answer is: should Lexington develop a Business Improvement District (BID)? In order to answer this question, I will be examining the impact, if any, BIDs have on businesses in cities with similar characteristics to Lexington. The policy interest associated with this project is, first and foremost, why hasn’t Lexington developed a BID? If there is a state statute allowing
BIDs and one has been established in Louisville, why has Lexington not already done this?

**LITERATURE REVIEW**

Research on Business Improvement Districts (BIDs) is fairly limited in scope, focusing primarily on the innovation and characteristics of BIDs, with little literature on the actual impacts of BIDs. There are many definitions of BIDs, but Garodnick (2000) defines a BID as “territorial subdivisions within a city in which all property owners or businesses are subject to additional tax assessments that are used to fund services and improvements within the district” (p. 1174). The type of assessment varies among the BIDs. It is important to note this is a voluntary tax business and property owners impose on themselves. To expand upon the definition of a BID, Garodnick (2000) goes on to describe some of the services that are provided such as garbage collection, street maintenance, security, some social services, all of which are intended to improve the quality of life within the BID.

In order to fully understand BIDs, it is important to clarify the difference between a Business Improvement District and Tax Increment Financing (TIF) districts, because they are often mistaken as the same thing. According to Caruso and Weber (2006), “TIF districts capture future incremental tax revenue beyond a base over a period of 20-plus years and use it to finance redevelopment projects and pay off municipal loans floated for larger infrastructure projects” (p. 191). TIFs are typically
used to fund large-scale capital improvement programs and also private development costs (Caruso and Weber, 2006). BIDs on the other hand, “do not typically fund private construction projects and, at most, fund pre-development costs or façade improvements to enhance the general environment” (Caruso and Weber, p. 191).

BIDs do not have a long history; but in the short time they have been around they have made significant changes to downtowns. According to Mitchell (2001), BIDs emerged in the 1980s and expanded in the 1990s to cities of all sizes, and have “fundamentally altered the face of service delivery to America’s downtown districts” (p. 202). The services provided by BIDs are services that local governments typically provide, yet BIDs provide the services as a means of making cities livable and competitive (Levy, 2001). BIDs are not trying to replace local governments, rather provide supplemental services with the goal of improving the quality of life within the BIDs.

BIDs may provide multiple services to the public. Mitchell (2001) describes nine services provided by BIDS: capital improvements, consumer marketing, economic development, maintenance, parking and transportation, policy advocacy, public space regulation, security, and social services (p. 203). The range of services that BIDs provide is immense and for the goal of improving the district in multiple ways. Levy (2001) observes that the money being spent providing these services is new money not diverted money from neighborhoods. This practice shows people are willing to pay for additional services that will improve the quality of life in their district. Turner (2002)
observes that BIDs provide municipal services to the downtown districts, which allows private control of public space. Private control allows for the services some individuals want and are willing to pay for.

BIDs are more than voluntary districts that provide extra services to make the area nicer and improve the quality of life; they are actually much deeper. Mitchell (2001) describes five important things that someone needs to know to understand BIDs. First of all, “BIDS are authorized by law through state legislation that permits local governments to create them” (p. 116). The state statute determines how funds can be collected as well as the basic organization of BIDs (Mitchell, 2001). Second, Mitchell (2001) states that BIDs are usually established by a petition process. This is essential to note because it shows it is something the people in the district want, rather than something that is imposed upon them. Third, according to Mitchell (2001), is most of the funding for BIDs comes from an added assessment on property/business owners in the district. This is important because it shows that it is not the local government paying for the extra services which only some districts are receiving. A fourth characteristic that Mitchell (2001) says of a BID is they “may implement services through a nonprofit organization, government agency, or public-nonprofit partnership” (p. 118). BIDs take many different forms and each BID varies from others. The fifth characteristic is that the focus of a BID is doing what will benefit the district the most (Mitchell, 2001). These five characteristics of BIDs are valuable to note because they provide the basic information on BIDs that help in understanding the deeper function and organization,
but also fail to provide any empirical evidence relating to the impacts of BIDs.

A service many of the BIDs in larger cities focus on is that of public safety and security. Brooks (2007) compared crime in BID districts to districts without the presence of a BID and found “across a range of estimation methods, BIDs are associated with crime declines of 6 to 10%” (p. 15). Interestingly, Brooks (2007), points out that BIDs tend to reduce serious crime more than less serious crime. According to Hoyt (2003), Philadelphia BIDs operate using a ‘clean-and-safe’ theory, “providing private security and sanitation service” (p. 371). In Philadelphia, the BIDs provide security personnel that coordinate with the efforts of the local police, according to Hoyt (2003). The security personnel are trained to detect suspected criminal activity and are equipped with radios or telephones allowing them to communicate with the local police (Hoyt, 2003). This heightened security is meant to deter criminal activity in the BID. Another interesting component of BIDs in Philadelphia is “BID managers support massive repair, antigraffiti, and sidewalk and street cleaning efforts” (Hoyt, 2003, p. 371). These extra efforts are intended to remove signs of neglect that invite criminal activity (Hoyt, 2003). This is one example of how the services a BID provide can create a positive environment and have multiple effects on the district.

BIDs provide a multitude of services, but there are also multiple approaches to BIDs. Mitchell (2001) discusses three approaches to the management of BIDs. The first approach that Mitchell (2001) discusses is the entrepreneurial approach, which is
“focused on independent decision making and creative thinking” (p. 206). Mitchell (2001) describes this approach as continuously searching for unique and creative ways to solve problems and implement public policies, often times completed by a single entrepreneur. Although this approach brings creative solutions to problems, it is not without problems of its own. Mitchell (2001) also reveals that this approach is risky, requires more time for creativity than managers may have, and it conflicts with democratic theory. The second approach that Mitchell (2001) describes is the public servant approach; it focuses on providing an ombudsman for downtown businesses because it is focused on serving constituent needs immediately. The problems associated with this approach are political including, who to represent in the political process and also which side to take in political controversies according to Mitchell (2001). The final approach that Mitchell (2001) describes is the supervisor approach, it focuses on the technical supervision of activities and is “fiscally cautious and politically noncontroversial” (p. 208). The downfall, according to Mitchell (2001), is that it does not engage in the creative marketing that is needed for a BID to be successful. The different approaches that Mitchell describes display the variety that BIDs can take and the flexibility within them.

While there are general characteristics of BIDs, there are many different ways in which BIDs are formed. Because BIDs are authorized by state legislation, BID laws and regulations vary by state (Brooks, 2007). Different approaches are taken to the basic questions of BIDs, such as district designation, responsibilities, finances and
administration according to Caruso and Weber (2006). However, most BID ordinances, according to Caruso and Weber (2006), “provide for property owner- or business-dominated advisory, administrative, or management boards that implement the BID’s program and manage its operations” (p.190). Also, it is true that “individual districts impose their own tax rate differentials determined by a plan budget” (Caruso and Weber, 2006, p. 190).

BIDs have some disadvantages as well. The negative effects stem from the positive benefits of BIDs. One possible negative effect that a BID may have, according to Garodnick (2000), is that governments may decrease services or change services in order to avoid duplicating the efforts of BIDs, and this could create a free rider problem with BIDs. Garodnick (2000) also states that BIDs are hard to disband and “will use its influence to achieve maximum benefits for the narrow interest of the represented members” (p. 1767). Although Garodnick (2000) describes a negative effect of BIDs, he states that “BIDs should be preserved because of their success in solving complex municipal problems” (p. 1769). Brooks (2007) believes that “from a social welfare perspective, the BID law is the essential policy that allows neighborhoods to provide locally desirable public goods” (p. 15). The positive benefits of BIDs, according to research, seem to outweigh the negative benefits.

The current research describes BIDs as an innovative and creative way to improve the quality of life in downtown districts. Studies have been performed on the
different approaches, the types of services, and the benefits of BIDs, but research on the long term effects of BIDs is very limited. This could be because BIDs have only recently emerged and expanded. Now it may be possible to study the long term effects of BIDs to see if they may be a long-term solution to revitalizing downtowns and if they can sustain as productive solutions over time.

**METHODOLOGY**

The objective of this study was to test if establishing a Business Improvement District (BID) has an impact on businesses in a downtown district. The units of analysis I examined are zip code level of cities. In order to make my analysis relevant to Lexington, I examined cities with similar characteristics. I wanted to make this unique to Lexington because of the recent developments attracting businesses out of the downtown area.

In choosing cities, I first looked at college towns, and then narrowed cities down based on either population or type of government. I chose ten cities that established a BID, and compared those with ten cities without a BID. I chose cities for comparison within the same state in order to help control for state effects and I also only chose one pair of cities per state. In choosing the comparison cities I first looked at population data tables from the *County and City Data Book: 2007* for cities with similar population characteristics to the BID cities. I excluded cities within the same county or
metropolitan area as a city that had a BID in order to eliminate the possibility of capturing spill-over effects. Table 1 displays cities included in this study.

**TABLE 1: Cities in Study**

<table>
<thead>
<tr>
<th>BID City</th>
<th>Comparison City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boulder, CO</td>
<td>Greeley, CO</td>
</tr>
<tr>
<td>Columbia, SC</td>
<td>Greenville, SC</td>
</tr>
<tr>
<td>Columbus, GA</td>
<td>Athens, GA</td>
</tr>
<tr>
<td>Dayton, OH</td>
<td>Middletown, OH</td>
</tr>
<tr>
<td>Grand Rapids, MI</td>
<td>Ann Arbor, MI</td>
</tr>
<tr>
<td>Hampton, VA</td>
<td>Lynchburg, VA</td>
</tr>
<tr>
<td>Madison, WI</td>
<td>La Crosse, WI</td>
</tr>
<tr>
<td>Raleigh, NC</td>
<td>Fayetteville, NC</td>
</tr>
<tr>
<td>Springfield, MA</td>
<td>Worcester, MA</td>
</tr>
<tr>
<td>St. Louis, MO</td>
<td>Jefferson City, MO</td>
</tr>
</tbody>
</table>

It is important to point out Jefferson City and Middletown were chosen because other comparable cities in Missouri and Ohio were excluded because they did not meet the qualifications of this study, either having a BID or in the same county as a city with a BID. It is also important to point out St. Louis was chosen because Renee Jackson, President/Executive Director of the Downtown Lexington Corporation, was interested in the organizational structure of the BID organization.

I collected basic information about the BIDs, including the year of establishment and size of the BID area. The BIDs differ among cities based on when they were established and their size. Table 2 displays the general characteristics I collected about the BIDs, including population of the city, name of the BID organization, year the BID was established, and if available the size of the BID. I was unable to collect the actual size of the BID because some BIDs do not measure the actual size of the BID.
TABLE 2: Characteristics of BIDs Included in Study

<table>
<thead>
<tr>
<th>City and Population</th>
<th>Name of BID Organization</th>
<th>Year BID Established</th>
<th>Size of BID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boulder, CO (91,685)</td>
<td>Downtown Boulder Business Improvement District</td>
<td>2000</td>
<td>49 blocks</td>
</tr>
<tr>
<td>Columbia, SC (117,088)</td>
<td>City Center Partnership</td>
<td>2001</td>
<td>36 blocks</td>
</tr>
<tr>
<td>Columbus, GA (185,271)</td>
<td>Columbus Business Improvement District</td>
<td>1999</td>
<td>47 blocks</td>
</tr>
<tr>
<td>Dayton, OH (158,873)</td>
<td>Downtown Dayton Special Improvement District</td>
<td>1996</td>
<td>N/A</td>
</tr>
<tr>
<td>Grand Rapids, MI (193,780)</td>
<td>Downtown Alliance</td>
<td>2001</td>
<td>N/A</td>
</tr>
<tr>
<td>Hampton, VA (145,579)</td>
<td>Coliseum Central Business Improvement District</td>
<td>1996</td>
<td>1,900 commercial acres</td>
</tr>
<tr>
<td>Madison, WI (221,551)</td>
<td>Madison Central Business Improvement District #1</td>
<td>1999</td>
<td>N/A</td>
</tr>
<tr>
<td>Raleigh, NC (341,530)</td>
<td>Downtown Raleigh Alliance</td>
<td>2000</td>
<td>110 blocks</td>
</tr>
<tr>
<td>Springfield, MA (151,732)</td>
<td>Springfield Business Improvement District</td>
<td>1998</td>
<td>10 blocks</td>
</tr>
<tr>
<td>St. Louis, MO (344,362)</td>
<td>Downtown St. Louis Community Improvement District</td>
<td>2000</td>
<td>165 blocks</td>
</tr>
</tbody>
</table>

Note: Population statistics are from the County and City Data Book: 2007 and are based on the year 2005.
Source: Information gathered from BID websites and phone conversations with BID staff.

I collected data from the Economic Census Zip Code Business Patterns for years 1994 through 2005. Zip codes were determined using the zip code of the BID address, and for the comparison cities, by using the address of a downtown organization. Using the zip codes of downtowns in comparison cities allowed for a more accurate comparison. This data captures the number of establishments, number of employees, and annual payroll for all business sectors, with the exception of government and farming. Rather than analyzing the total annual payroll, I calculated the average annual payroll for employees. Analyzing the average annual payroll for employees provided a
clearer picture of what individuals earn per year. In order to calculate the average payroll, I divided the annual payroll by the number of employees in the same year.

For this study I wanted to examine changes that occurred both before and after a city established a BID. I chose to look at the average annual growth rates. In order to do this I had to calculate the average annual growth rates using the following formula:

\[ \text{GIR} = \frac{y_2 - y_1}{y_1} \]

Where, \( y_2 \) is the value for current year and \( y_1 \) is the value for the previous year. I calculated the average annual growth rates for the number of establishments, average annual payroll, and number of employees.

In order to capture the effects of the BID and because it was unknown exactly when in the year the BID was established, I chose to classify the year the BID was established as before the BID. I conducted the analysis for the comparison cities using the same years, before and after, for the BID city. For example, Boulder, CO established a BID in 2000, so I classified years 2001 to 2005 as post-BID and 1994 to 2000 as pre-BID for both Boulder and Greeley.

After calculating the average annual growth rates, I performed a two-sample t-test with equal variances to test if there was a statistically significant difference in the means of BID and Non-BID cities pre and post-BID establishment. This was performed for the average annual growth rates for the number of establishments, average payroll,
and number of employees. Thus, the null hypothesis I am testing is that there is not a
difference in the means of BID and Non-BID cities pre and post-BID establishment, while
the alternative hypothesis is that there is a difference in the means of BID and Non-BID
cities pre and post-BID establishment.

In addition, to control for possible differences between states, I estimated a
difference in difference regression to test if there was a statistically significant
difference in the average annual growth rates of BID and Non-BID cities pre and post-
BID establishment. The term difference in difference refers to the following. The
difference in mean for Non-BID cities before and after the year of the establishment of
the BID in the comparison BID city acts as a control for some other factors acting at the
same time on similar cities. The difference in differences is the BID city change minus
the Non-BID city change. This is estimated as a regression which also controls for other
possible effects of the states, each of which has a BID city and a Non-BID city. For this
regression, the differences between average annual growth rates in one of the three
outcomes in BID and non-BID cities were calculated and used as the dependent variable.
Dummy variables for BID year and for state served as independent variables. The
coefficient on BID year tests the effect of having a BID. Separate regressions were
performed using average annual growth rates for the number of establishments, growth
rates for the average annual payroll, and growth rates in the number of employees as
dependent variables.
RESULTS

The results of the analysis were compared to the critical value 1.96 (a t-value, with a significance level of .05, degrees of freedom of 108). If the absolute value of the t-value is greater than the critical value, it can be concluded that the null hypothesis, difference in the means of BID and Non-BID cities pre and post-BID establishment, is incorrect and therefore rejected.

Tests of Differences of Growth Rates Comparing BID and Non-BID Cities

The results of the t-tests to estimate if there was a statistically significant difference in the means of BID and Non-BID cities pre and post-BID establishment produced t-values less than the critical value 1.96, leading to the conclusion there was not a statistically significant difference in the means of BID and Non-BID cities pre and post-BID establishment. This result is true for the average annual growth rates for the number of establishments, average payroll, and number of employees.

Table 3 displays the results of this analysis for all three tests. The outcome being tested is in the first column. The second column displays the mean for the BID city, while column three displays the mean for the Non-BID comparison city. The fourth column displays the difference between the BID and Non-BID means. The standard error is displayed in the fifth column. The last column displays the t-value that the tests produced.
TABLE 3: Result for T-Tests of Differences of Growth Rates
Comparing BID and Non-BID Cities

<table>
<thead>
<tr>
<th>Average Annual Growth Rates</th>
<th>BID</th>
<th>Non-BID</th>
<th>Difference</th>
<th>Standard Error</th>
<th>T-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Establishments</td>
<td>0.0148</td>
<td>0.0061</td>
<td>-0.0087</td>
<td>0.0129</td>
<td>-0.6753</td>
</tr>
<tr>
<td>Average Payroll</td>
<td>-0.0045</td>
<td>0.0106</td>
<td>0.0111</td>
<td>0.0187</td>
<td>0.5925</td>
</tr>
<tr>
<td>Number of Employees</td>
<td>0.0104</td>
<td>0.0026</td>
<td>-0.0078</td>
<td>0.0225</td>
<td>-0.3473</td>
</tr>
</tbody>
</table>

Difference in Difference Regression Comparing BID and Non-BID Cities

The results of the difference in difference regression comparing BID and Non-BID cities produced t-values less than the critical value 1.96, leading to the conclusion there was not a statistically significant difference in the means of BID and Non-BID cities pre and post-BID establishment. This result is true for the average annual growth rates for the number of establishments, average payroll, and number of employees.

Table 4 displays the results of this analysis for all three tests. The outcome being tested can be found in the first column. The second column displays the estimated coefficient produced by the regression. The third column displays the standard error of the analysis. The last column displays the t-value produced from the regression.
### TABLE 4: Results for Difference in Difference Regression
Comparing BID and Non-BID Cities

<table>
<thead>
<tr>
<th>Average Annual Growth Rates</th>
<th>Estimated Coefficient</th>
<th>Standard Error</th>
<th>T-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Establishments</td>
<td>0.0116</td>
<td>0.0139</td>
<td>0.84</td>
</tr>
<tr>
<td>Average Payroll</td>
<td>-0.0172</td>
<td>0.0204</td>
<td>-0.84</td>
</tr>
<tr>
<td>Number of Employees</td>
<td>0.0047</td>
<td>0.0244</td>
<td>0.19</td>
</tr>
</tbody>
</table>

Note: Regressions also control for state (CO, SC, GA, OH, MI, VA, WI, NC, MA, and MO). In every case the state effects are statistically insignificant at 5% level of significance.

The variance in the difference between the BID cities and the Non-BID cities is relatively small, eliminating collinearity or other likely statistical problems as an explanation of the statistically insignificant results, which means either there is some significant variable not being controlled for or the establishment of a BID does not have a significant effect on the average annual growth rates for the number of establishments, average payroll, and number of employees.

### DISCUSSION AND LIMITATIONS

Having found no statistically significant difference in the means of BID and Non-BID cities pre and post-BID established, I cannot reject the null hypothesis that there is not a difference in the means of BID and Non-BID cities pre and post-BID establishment for the average annual growth rates for number of business establishments, average annual payroll, and number of employees. The data provide no evidence to support the hypothesis that BIDs lead to improvements in economic conditions in these cities.
As with any study, there are limitations and this study was no different. This study was hindered by several data issues. Ideally, I would have liked to have looked at an even smaller unit of analysis, by examining actual block levels, because the areas of the BID differ in size and most do not cover the entire area of a zip code. Breaking the units of analysis down on the block level would have allowed for comparisons of a BID and non-BID district within the same city. I was not able to collect data on business patterns any further than at the zip code level, and because some downtowns are covered by one zip code, I did not feel as if an accurate comparison could be made among zip codes within the same city. Another limitation with the zip code business pattern data was that it was only available for the years 1994 through 2005. This caused me to throw out cities that started BIDs prior to 1996 and after 2003 because I wanted to look at least three years of data either before or after establishment of the BID.

Another limitation with the data was that I was unable to control for factors such as total population, population density, and socioeconomic characteristics because the Census of Populations is only taken every ten years. I would have also liked to control for personal and business income, as well as the tax base, but was unable to because the Economic Census is only performed every five years. If I had been able to control for these variables, the results of my analysis may have been different as well as the type of analysis used in the study. It would have been useful to be able to control for trends with more data.
While data issues were a major hindrance to the study, there were other factors limiting the study as well. Time was also a factor. Because of the lengthy amount of time that it took to collect the data, I had to limit the analysis to ten BID cities and ten non-BID cities. Another factor limiting the study was terminology used to label BIDs. For example, in Missouri BIDs are labeled as Community Improvement Districts (CIDs) and in Ohio BIDs are labeled as Special Improvement Districts (SIDs). The study was conducted in light of the many limitations; however, the results might have differed had there been fewer limitations.

**CONCLUSION AND RECOMMENDATIONS**

A survey of random BIDs performed by the International Downtown Association (IDA) and the Professional Urban Management Associates (PUMA) in October 2003 found several economic impacts of BIDs including: downtown markets outperforming offices in the suburbs, increased property values, outperforming non-BID districts in sales tax receipts, higher percentages of retail occupancies, as well as several others. Rather than looking at other cities for comparison, this suggests looking at other districts or suburbs of the same city.

Based on the literature there must be some positive effect of BIDs that I did not capture. According to Mitchell (2001), BIDs are an important part of downtown renewal efforts, but provides no empirical evidence on the impact of BIDs. In an email correspondence with Matt Kennel, President and CEO of the City Center Partnership
(Columbia, SC BID), he stated he thinks cities can be safe and clean without BID’s if you have the right elected leaders and a strong Mayor who is pro-downtown. Mitchell (2001) does point out assessing the impacts of BIDs is difficult and the major problem in assessing BID effects is sorting out the effects of other variables.

The lack of empirical evidence on the effects and accuracy in capturing the effects of BIDs has some skeptical of BIDs. Caruso and Weber (2006) state some “property owners, local governments, and business organizations remain cautious about imposing any new tax levies without assurances about specific service delivery outcomes” (p. 215). It is important that BIDs have performance measures in place to ensure accountability; BIDs can do this by distinguishing and prioritizing their mission. Caruso and Weber (2006) make an interesting point that even if the BIDs cannot statistically express the outcomes were the effect of the BID, the attention to the outcomes may lead to more efficient service delivery. This implies that a system of performance measures is important to the outcome of a BID.

Downtown Lexington currently faces issues associated with the urban sprawl of new developments such a Hamburg Place and more recently, the developments around Fayette Mall. Retail in downtown Lexington has been minimal for years. Festival Market was an attempt to provide a specialty food, retail, and entertainment center in downtown Lexington, but did not do well. It is clear that a strong approach at revitalization is necessary. The establishment of a BID may be the solution to
revitalizing the downtown district of Lexington as BIDs have proved as successful approaches for downtown revitalizations.

Quantitatively, I found no positive effect of BIDs, however there was a low variance in the difference of the BID cities and the Non-BID comparison cities, meaning that the cities were well matched. Perhaps using these same cities, but examining the sales tax receipts or the type of business establishments might provide a better analysis of the impact that BIDs have on businesses. I would recommend further study be conducted on the impact that a BID has, more specifically examining other quantitative and qualitative impacts of establishing a BID before downtown Lexington takes this approach to revitalization.
REFERENCES


Economic indicators from selected BIDs. (October 2003) Survey by International downtown Association and P.U.M.A.).


