Assessing Economic Development Incentives:
Central Texas City Manager Perspectives

By

Nina N. Lester

An Applied Research Project
(Political Science 5397)
Submitted to the Department of Political Science
Texas State University – San Marcos
In Partial Fulfillment for the Requirements for the Degree of
Masters of Public Administration

Spring 2005

Faculty Approval:

_______________________________
Dr. Patricia M. Shields

_______________________________
Stephanie Garcia
# Table of Content

**Chapter 1: Introduction** ......................................................................................................................... 1  
  Tools of the Trade ................................................................................................................................. 1  
  Research Purpose ................................................................................................................................. 2  
  Chapter Summaries .............................................................................................................................. 3  

**Chapter 2: Literature Review** ............................................................................................................... 4  
  Economic Development ......................................................................................................................... 4  
  Economic Development Now ............................................................................................................... 6  
  Why Use Economic Development? ...................................................................................................... 7  
  Goals of Economic Development ....................................................................................................... 8  
    Attract Target Industry ....................................................................................................................... 8  
    Employment Opportunities ............................................................................................................. 10  
    Increased Tax Revenue .................................................................................................................. 11  
    Increased Economic Activity ........................................................................................................ 12  
  Goals as Criteria for Incentives ........................................................................................................... 13  
  Economic Development Incentives ..................................................................................................... 15  
    History ........................................................................................................................................... 15  
  Why Use Incentives? ........................................................................................................................... 16  
    Tax Abatement ............................................................................................................................... 17  
    Tax Increment Financing ............................................................................................................... 18  
    Industrial Development Revenue Bonds ..................................................................................... 19  
    Loan Guarantees ............................................................................................................................ 20  
  Conceptual Framework ....................................................................................................................... 21  
  Chapter Summary ............................................................................................................................... 23  

**Chapter 3: Methodology** .................................................................................................................... 24  
  Chapter Purpose ................................................................................................................................... 24  
  Research Technique ............................................................................................................................. 24  
  Unit of Analysis ................................................................................................................................. 27  
  Population and Sample ....................................................................................................................... 27  
  Statistics ............................................................................................................................................... 28  
  Chapter Summary .............................................................................................................................. 28
Chapter 4: Results

Chapter Purpose..............................................................................................................29

Description of Returned Surveys..................................................................................29

Goal 1: Attract Target Industry.....................................................................................30

Goal 2: Employment Opportunities...............................................................................31

Goal 3: Increase Tax Revenue.......................................................................................32

Goal 4: Increase Economic Activity.............................................................................33

Ranking of Successfulness............................................................................................33

Chapter Summary..........................................................................................................35

Chapter 5: Conclusion....................................................................................................36

Chapter Purpose..............................................................................................................36

Summary of Research....................................................................................................36

Perspectives of a Professional.......................................................................................38

Next Steps for Research..................................................................................................39

Bibliography......................................................................................................................42

Appendix A: Questionnaire............................................................................................45

Appendix B: TCMA Regions..........................................................................................47

Appendix C: Statistics......................................................................................................48

Tables

Table 2.1 Linkages of Descriptive Categories for Economic Development Goals to Literature Sources .........................................................................................................................22

Table 2.2 Linkages of Descriptive Categories for Economic Development Incentives to Literature Sources ..........................................................................................................................22

Table 2.3 Connecting Conceptual Frameworks................................................................23

Table 3.1 Operationalization of the Conceptual Framework...........................................25

Table 3.2 Response Code and Scales.............................................................................27

Table 4.1 Attract Target Industry Survey Results...........................................................30

Table 4.2 Employment Opportunity Survey Results.....................................................31

Table 4.3 Increase Tax Revenue Survey Results.............................................................32

Table 4.4 Increase Economic Activity Survey Results...................................................33

Table 4.5 Ranking of Successfulness.............................................................................34

Table 5.1 Summary of Survey Results............................................................................37
Chapter 1: Introduction

Tools of the Trade

There is a trend for municipalities to improve their communities in order to provide a better quality of life for citizens (Malizia and Fesser 1999, p8). Much of this movement for improvement comes in the form of economic development projects. Cities vie for new businesses to come in and create changes to the community environment. Such projects can change a municipality’s tax base, turn them into tourist attractions, or provide thousands of much needed jobs.

The City of San Marcos, Texas undertook the huge economic development project of not just one, but two outlet malls. As a result, the city’s budget now relies heavily on sales taxes, and the malls have become one of Texas’s most visited tourist attractions\(^1\). Additionally, San Antonio, Texas will experience many changes as a result of Toyota Motor Co. building a new truck plant within the city. While the plant itself will employ some 2,000 workers, the Texas Comptroller’s office estimates the surrounding area will gain around 16,000 jobs, directly, indirectly and induced (Phillips et al. 2004, p1).

Economic development is a staple in the growth of municipalities, and the use of incentives continues to grow in popularity (Campbell et al. 1999, p21; and Peters and Fisher 2004, p28). State and Local governments have practiced economic development as early as the 1940s, and incentives have been utilized in these programs for over 30 years (Peters and Fisher 2004 p28; Walzer and P’ng 1995, p130). Ideally, economic development promotes the public interest. Hence, local development policy targets the

\(^1\) Sales taxes make up over 50% of San Marcos’ tax base. From the City of San Marcos budget workshop 2004.
development of businesses and services that facilitate the community’s prosperity and quality of life (Malizia and Fesser 1999, p4).

Economic development incentives act as tools to facilitate the goals of economic development. The purpose of economic development incentives is to make locating and operating a business in a municipality more attractive than a neighboring area, much like the way private businesses offer incentives (discounts or sales) to their customers to make doing business with them more attractive than doing business with another company (Downing 2004, p73). Municipalities can successfully use an incentive or a combination of incentives to attain the overlapping goals of economic development attracting target industries, employment opportunities, increasing tax revenue, and increasing economic activity (Hofer 2003, p754).

**Research Purpose**

Existing literature on economic development and incentives often cites that the downfall of the literature is its failure to judge a program’s ability to effectively meet their goals (Rasmussen et al 1984, p18; Peters and Fisher 2004, p28). The purpose of this research is threefold. First, the literature will identify the four major goals of economic development and the four most commonly used incentives. Second, a connection will be drawn between the goals of economic development and how they act as adequate criteria to assess the success of an incentive. Last, the perspectives of Central Texas City Managers will assist in assessing the success of incentives in achieving the goals of economic development through this connection.

This research is important because it provides data identifying the best incentive for achieving each of the four economic development goals. These goals are identified as
attracting target industry, creating employment opportunities, increasing tax revenue, and increasing economic activity. Additionally, this research contributes to the existing literature on economic development. While much of the available literature provides information on the purpose of economic development and incentives, no study was successful in identifying the tools necessary, or best suited for accomplishing the goals of economic development. As such, this research fills a gap by providing information on the connection between economic development and incentives. In addition to making this connection, the research also offers a guide for decision makers to aid them in choosing the most appropriate incentive for their situation.

**Chapter Summaries**

To achieve the research purpose, this study is divided into four chapters. Scholarly literature describing the history and goals of economic development, the history, use, and types of incentives and the conceptual framework (descriptive categories) are provided in Chapter 2. Taking the connection between economic development goals and types of incentives (as identified in Chapter 2) into consideration, Chapter 3 operationalizes these descriptive categories. Chapter 3 also presents the survey instrument used as well as a discussion of the population, unit of analysis, and the statistics. Chapter 4 discusses the results of the survey and provides an analysis of the data. The final chapter, Chapter 5, discusses the findings of the research in relation to the overall research purpose as well as recommendations for future research.
Chapter 2: Literature Review

Chapter Purpose

This chapter examines the scholarly literature on economic development. It specifically focuses on the goals of economic development and the incentives used to achieve these goals. This information is critical to understanding how the goals of economic development can also act as criteria for assessing the effectiveness of incentives. The foundation for the descriptive categories is developed throughout the chapter.

Introduction

Though often the center of controversy, the use of incentives as a tool of economic development is rapidly becoming the norm (Campbell et al. 1999, p21; Peters and Fisher 2004, p27). At the same time, Peters and Fisher (2004, p27) maintain that the critics of incentives seek to have their use banned. As described by Feiock (2002, p123), the literature discussing economic development policies is easily “characterized as a hodgepodge of conflicting perspectives that do not speak to or with each other.” The existing literature on economic development and incentives often cites that the downfall of the literature is its failure to judge a program’s ability to effectively meet their goals (Rasmussen, et al. 1984, p18; Peters and Fisher 2004, p27). Additionally, the literature fails to address issues of the impact of these polices (Feiock 1988, p140).

Economic Development

Simply put, economic development is the use of development (such as businesses or infrastructure) that will better the surrounding economy. For example, a municipality
might build a new road that connects an isolated and impoverished area with the booming center of town. This development should better the economy of the impoverished area by allowing easier transportation to a potential job in the center of town and of the town as a whole by lowering the employment rate.

History

State and Local governments have practiced economic development as early as the 1940s and incentives have been utilized in these programs for over thirty years (Peters and Fisher 2004, p27; Walzer and P’ng 1995, p130). Before the 1960s, however, "concern for economic development was largely confined to the developing nations of the 3rd World" (Malizia and Fesser 1999, p5). According to Walzer and P’ng (1995, p130) there were three waves of economic development policy. The first wave of economic development policy, starting in the late 1940s, was enacted to decrease business costs in specific governmental jurisdictions as well as to attract larger businesses. Cities shifted away from the use of Industrial Revenue Bonds and increased their use of low cost loans, tax abatements, and free land. In the second wave, during the 1970s, economic development policies focused on enhancing the attractiveness of locations within an area for new businesses. The 1980s brought the third wave. Policies during this decade were geared toward increasing competition between local businesses. During all three waves, incentives were used to accomplish development goals. By the 1990s, economic development was generally accepted as an important function of local governments.
Economic Development Now

Within the last decade, local governments and organizations have increasingly implemented economic development policies. According to Eberts and Erickcek (2002), this increase is occurring because local government can more adequately evaluate and act upon the specific requirements of their own areas rather than at the national or state level. Such as, the federal government generally does not promote economic development policies with the exception being severely impoverished areas. State governments tend to assist economic development when municipalities are unable to obtain resources to create the needed development (Eberts and Erickeck 2002). A prime example occurred during the Clinton administration when the federal government paid particular attention to poverty and urban neglect issues highlighted by Clinton. New economic environments were created through local economic development to remedy those issues (Blakely and Bradshaw 2002, p22). In those economically depressed areas, policies at the local level created enterprise zones to invigorate the economy (Blakely and Bradshaw 2002, p22). Regardless, economic development at the national level generally does not get the same quality of results as when similar programs are implemented at the local level.

Additionally, Eberts and Erickeck (2002) maintain that localities are better equipped to coordinate the services needed by local citizens. Walzer and P’ng (1995, p127) stress the role of local policymakers in economic development. They hold that city officials most directly face the pressure that stems from the need to replace lost jobs and improve the local tax base. Thus, initially, city officials are often left with the burden of accomplishing these tasks. Local governments and organizations, however, depending upon their ability to make their case, do eventually receive guidance and aid from state agencies for these efforts (Eberts and Erickceck 2001).
**Why Use Economic Development?**

Due to the lack of assistance from the federal government and limited assistance from state agencies, local governments are left to provide economic development. Local governments hold the responsibility to implement economic development programs and must do so “to intervene in the right place at the right time, affecting both people and place” (Blakely and Bradshaw 2002, p95). Cities often use economic development to project a particular image of their area. Hofer (2003, p749) maintains that the use of economic development programs projects an image of favorable a business environment in the region, thus attracting more business. "Promoting economic growth and development for the entire community is the preferred objective [of economic development]; increasing competitiveness remains the preferred strategy" (Malizia and Fesser 1999, p6).

Ideally, economic development promotes the public interest. In order to promote the public interest, municipalities support the development of businesses that provide the services that facilitate the community’s prosperity and quality of life (Malizia and Fesser 1999, p8). Blair (1995, p168) maintains that the major incentive for the use of economic development is the external benefits that residents of that area receive. Economic development is also a means to create physical improvements to the community. Economic development programs are designed to identify opportunities and challenges within a community as well as the resources available to meet these challenges. Additionally, program goals should be addressed and should be specific to the region being affected (Blakely and Bradshaw 2002, p76, 78).
Goals of Economic Development

When implementing a program, such as economic development, it is necessary for the agency to identify the goals of the program, and the results that are expected. The most cited goal of economic development is employment or job creation. One reason job creation is most cited is because it is the most accessible measure and is comparable across jurisdictions (Walzer and P’ng 1995, p135). As mentioned before, the basic strategy of economic development is to increase competition (Malizia and Fesser 1999, P6). In order to create competition, cities must attract businesses to the area. Competition is the basic premise from which all other goals of economic development are derived.

“Aggressively seeking the benefits of new investment, new jobs, and more industry drives the creation of a strong tax base, builds a strong local economy, and insures the financial success of our families and communities” (Friar 1999, p4). The goals of economic development discussed in this paper are attract target industry, create employment opportunities, and increase tax revenue. If these three goals are achieved, the community should be able to achieve of the ultimate goal of increased economic activity. While these goals do overlap, they are discussed separately for the purposes of this research. Attracting target industries creates new jobs. More jobs help to increase tax revenue and as a result, economic activity should increase as well.

Attract Target Industry

According to Anderson and Wassmer (2000, p1), the attraction of new business activity to cities is a concern of economic development policy. A 1989 ICMA (International City Management Association) survey reports 67% of its respondents identify “attracting new businesses as an important economic development goal” (Black
As of 1984, every state in the United States reported soliciting targeted industries to locate in their area (Rassmusen et al. 1984, p 18). This solicitation of target industry is noticeably similar to actions seen in the private sector. Private businesses actively seek to attract new customers while maintaining those they have already lured to the area (Blair 1995, p170). These target industries are brought into cities to provide services need by the citizens, and must follow the trends and atmosphere of the city. Municipalities seek target industries that will improve the area. Such businesses should generally provide above minimum wage employment and services currently not available in the city, and should meet the tone the city is trying to project. Through economic development, municipalities are in the business of attracting new businesses.

Blair (1995) uses the revitalization of forgotten downtown areas as an example that demonstrates why cities may want to bring in new industry. Cities in Missouri have actively promoted the redevelopment of these blighted downtown areas (Downing 2004, p79). New businesses are drawn into these areas to set up their businesses in vacant buildings. This is two-fold in its purpose. The new business in downtown areas creates new economic activity in an area that has not had much, and businesses are more likely to aid in the efforts to beautify the area so as to attract new customers. The most obvious reason, however, for municipalities to strive toward bringing new industry in, is jobs.

This relationship between attracting target industry and job creation is the base from which successful economic development programs are built. Keeping businesses

---

2 1989 ICMA survey consisted of 3,461 cities, towns, and counties.
3 Every year states and municipalities offer about $30 billion in incentives with the goal of attracting new businesses to communities (Black 1991, p11).
within the city ensures a stable level of employment.\(^4\) Gaining new businesses generally increases employment opportunities. Overall, “business location in an area generally is thought to mean jobs, property tax revenue, and other economically positive results” (Hofer 2003, p748).

**Employment Opportunities**

Every city looks for ways to create new jobs. Additionally, as seen, the number one way to create new jobs is to recruit new industry into the city. Quite often, cities experience a high rate of unemployment or are limited to available jobs paying only minimum wage (Anderson and Wassmer 2000, p2). To correct this cities use economic development to increase employment opportunities while increasing the income per capita (Hofer 2003, p754; Anderson and Wassmer 2000, p2). It is, however, important for municipalities to also consider the growth of the city and its population when attempting to add employment opportunities. As such, economic development programs often require a minimum number of employment opportunities that prospective businesses must provide and maintain (Hofer 2003, p751).

One purpose for the creation of new employment opportunities is the increase in tax revenue that jobs bring. Hofer (2003, p754) discusses the relationship between job creation and the increase of tax revenue in her case study of San Marcos, Texas. She holds that there is an interactive effect between net job changes and net tax revenue changes. As the number of employment opportunities increase, the amount of tax revenue generated proportionally increases. Anderson and Wassmer (2002, p2) further

\(^4\) Retaining businesses is also an important issue in economic development but was not included in this research because retention involves other variables not related to this study.
support the relationship between employment opportunities and tax revenue in that “an additional job generates local tax revenue equivalent to the increase in local public services that accompany the new job.” This relationship between employment opportunities and an increase in the ability to provide services leads to the third goal of economic development, increased tax revenue.

**Increased Tax Revenue**

Increased Tax Revenue primarily results from property taxes and sales taxes boosted by businesses brought into municipalities through economic development (Blair 1995, p169). As such, municipalities encourage economic development with expectations that new business and employment opportunities will create enough excess tax revenue to cover extra costs for city public services (Blair 1995, p168). The resulting excess should lessen the burden placed on city services and help increase the prosperity of municipalities. Blair (1995, 170) attributes this increase in tax revenue primarily to property taxes. He maintains, “land uses devoted to commerce and manufacturing generate net revenues for the city” (Blair 1995, p170). Blair continues that cities attempting to boost their local economies should focus their economic development around businesses to ensure this revenue increase. While businesses bring additional sales taxes to the economy of a city it is usually not strong enough to offset the needed increase in general revenue. The need for revenues shows the overlapping of the first goal of economic development, attracting target industry, to an increase in tax revenue. New industries create new venues through which taxes can be incurred.

An increase in tax revenue also relates to increased economic activity for municipalities. Blakely and Bradshaw (2002, p159) maintain that economic development
programs will only be successful if municipalities meet all of the needs of business. These needs include adequate land or infrastructure, financing assistance, and a suitable labor force. Each of these ‘needs of business’ should be available through increased city tax revenue.

**Increased Economic Activity**

The three previous goals must first be met in order for a municipality to see an increase in their economic stability. New target industry bring new jobs, thus creating more tax revenue. Increased economic activity should result from the combination of new businesses creating new jobs and allowing for the creation of more tax revenue (Feiock 1988, p141). Municipalities with slow, stagnant economies need new businesses to get the economy going (Blair 1995, p168). But without new employment opportunities, new businesses will do nothing to aid the overall city. These new businesses may generate an increase in sales taxes but, as previously discussed, property taxes are where cities find revenue.

An increase in employment opportunities is important to economic activity in a municipality (Anderson and Wassmer 2000, p1). A lower unemployment rate results in an increase of income per capita and allows for more money to be circulated through the economy in the form of both sales and property taxes (Blair 1995, p168). Individuals with increased incomes are more likely to purchase luxury items contributing to sales tax revenue. They are also more likely to purchase a home, contributing to property taxes and lowering the property tax rate. As a whole, the economic activity of a municipality relies on this chain of events.
There is, however, circularity in these goals. When a municipality’s economy is healthy and active, the area is more attractive to businesses. As more business moves to the area, the economic cycle begins again. But the question remains, if businesses are attracted to economically active areas and economic activity comes with an increase in employment and tax revenue from new businesses, how do economically stagnant areas get new businesses in the first place? The answer that many cities utilize is economic development incentives.

**Goals as Criteria for Incentives**

Much of the literature on economic development incentives cites their use as a means to facilitate the decision of a business to locate its operations in a particular area.\(^5\) Campbell et al (1999, p21), however, questions whether incentives actually accomplish this goal. As discussed previously, a business’s decision to locate in an area is the beginning of a successful economic development program. As such, the four goals discussed earlier lend themselves as adequate criteria to judge the effectiveness of incentives.

The purpose of economic development incentives is to make locating and operating a business in a municipality more attractive than a neighboring area, much like the way private businesses offer incentives (discounts or sales) to their customers to make doing business with them more attractive than doing business with another company (Downing 2004, p73). Successful incentives should bring businesses that are expected to

---

\(^5\) See, for example Anderson and Wassmer 2000, p2; Downing 2004, p73; and Walzer and P’ng 1995, 127
create business growth, employment opportunities, increase tax revenue, and increase economic activity.

While offering incentives is a first step in bringing economic development to a community, incentives that bring business growth and retention are often initially unsuccessful. Business that do not stay and put down roots within the community will not provide the expected benefits. Infrastructure built with the goal of attracting a particular business would be wasted unless the municipality can retain it. Additionally, incentives should bring in businesses that will create job opportunities. As such, it is common for municipalities to include a minimum number of jobs that must be created in order for a business to receive the benefits from a proposed development incentive (Hofer 2003, p751).

Although some economic development incentives allow businesses to pay lower property taxes or be exempt from them for a certain time frame, those incentives can still lead to an increase of tax revenue. It becomes necessary to view the long-term benefits of incentives. The creation of employment opportunities by businesses, regardless of their property tax payments, continues to contribute to an increase in tax revenue. Additionally, these property tax incentives are generally offered for a limited amount of time, at the end of which, businesses resume paying the appropriate amount of taxes (Hofer 2003, p749).

Since incentives are the tools used to achieve economic development, their effectiveness should be judged by the success in reaching the goals of economic development. An incentive should be considered effective if it leads to business growth, employment opportunities, increased tax revenue, and increased economic activity. As
such, these goals of economic development are the criteria that should be used to discern how effective incentives are.

**Economic Development Incentives**

Incentives are tools of economic development. Some of the most common incentives include tax abatement, tax increment financing, industrial development revenue bonds, and loan guarantees. They are offered as a means to compete with surrounding communities for potential businesses.

**History**

The ability to grant economic development incentives is given to local governments by the state (Anderson and Wassmer 2000, p2). While the offering of incentives began in the 1970s, municipalities “have always devoted a portion of their borrowing ability and infrastructure expenditure to activities that benefit business” (Anderson and Wassmer 2000, p2). Many states, such as Texas, give municipalities discretion over the appropriate package of economic development incentives offered to potential businesses (Hofer 2003, p749). Anderson and Wassmer (2000, p1) maintain that offering incentives is the most direct method of reducing a business’s costs. The use of incentives grew so much in popularity that by 1991, every state had the option to provide relief (Anderson and Wassmer 2000, p7).

City governments, having the ability to grant incentives from the state, are required to include this right in city ordinances. For example, the City of San Marcos, Texas adopted its policy on tax abatement incentives by local ordinance in 1990 (Hofer 2003, p751). Feiock (1988) maintains that economic development incentives are
important because they have the flexibility to allow them to be designed around individual situations. Incentive ordinances often also stipulate that it is by individual basis that the use of economic development incentives is determined (Hofer 2003).

**Why Use Incentives?**

The question remains, why do municipalities offer these incentives? Incentives are often offered because they act as tools to facilitate the goals of economic development. Due to today’s competitive development environment, public sector economic development incentives play a large role in a business’s location decision (Downing 2004, p73). Peters and Fisher (2004, p28) offer business location, new jobs, further economic growth, and increases in public revenues as major justifications for the use of incentives. These justifications may sound similar to the discussed goals of economic development.

Municipalities can successfully use an incentive or a combination of incentives to attain the goals of economic development (Hofer 2003, p749). After all, the main use of incentives is to encourage development (Feiock 1988, p145). Initially incentives can encourage development by attracting businesses to the area but in the long run it is done “through their impact on perceptions of the city’s receptivity to and climate for business,” the ultimate goal of economic development (Feiock 1988, p145). As seen, not all incentives work the same way and have different effects on the location decision of a potential business. The most commonly used incentives are tax abatement, industrial development revenue bonds, tax increment financing, and loan guarantees.6

---

6 See, for example: Anderson and Wassmer 2000, p1; Downing 2004, p73; Feiock 1988, p143; and Hofer 2003, p748.
Tax Abatement

Tax abatement is the “foregoing of revenue due to special tax exemptions” (Benker 1986 as cited in Hofer 2003, p748). Businesses are not required to pay certain taxes (usually property tax) for a specified amount of time. In general, tax abatements are “designed to…achieve particular economic goals, such as attracting business and industry, stimulating local employment or improving local economy” (Hofer 2003, p747; Mandleker et al. 1980, p21). Tax Abatements are the most frequently used in local governments because municipalities maintain control over many aspects of property taxes. Many states, such as Missouri, Texas, and Michigan, grant municipalities the ability to offer tax abatements to prospective businesses. Tax abatements, however, may be offered only to those businesses that are investing in new facilities or are rehabilitating existing facilities that are currently obsolete (Anderson and Wassmer 2000, p126). Other restrictions on tax abatements include capping the maximum period of abatement, a minimum number of jobs the business is required bring to the city, and a minimum amount of investment in property improvements (Hofer 2003, p751).

Tax abatement is a prime example of an incentive geared toward meeting the goals of economic development. Tax abatements are often key factors in the location decision of a business and “business location in an area generally is thought to mean jobs, property tax revenue, and other economically positive results.” Additionally, tax

---

7 See, for example: Hofer 2003, p748; Mandleker et al. 1980, p26; and Walzer and P’ng 1995, p132.
8 The City of San Marcos, Texas requires that a minimum of five jobs be created and maintained (Hofer 2003, p759).
9 See, for example: Edwards 1988 as cited in Hofer 2003, p748; Mandleker et al.1980, p27.
abatement can counteract the tendency property tax has of discouraging new developments during the location decision of a business (Mandleker et al. 1980, p26). One hundred percent of all developers surveyed in a 1977 Fleishman Hillard survey identified property tax savings as the most important factor in their decision to develop in an area (Mandleker et al.1980, p36). The effectiveness of tax abatement as an economic development incentive is measured as a net change in revenue. While tax revenue may initially drop as a result of the abatement, job opportunities and the end of the abatement period should produce a long-term increase in revenues.

**Tax Increment Financing**

Tax abatement is not the only type of tax incentive commonly used. Tax increment financing is another tax incentive used in economic development. Tax abatement and tax increment financing are similar in that they divert taxes. While tax increment financing does not abate taxes, revenues are not available for general purposes (Mandleker et al. 1980, p5).

Tax increment financing (TIF) establishes a geographic area for which debt instruments are issued to finance specific public improvements that will presumably enable economic development, usually be installing infrastructure (Johnson and Man 2001, p15; ICMA 1990, p56). TIFs are designed to create revenue needed to fund public improvements and infrastructure (Carroll 2003, p65). Municipalities designate a specific area as a ‘TIF zone.’ Within these zones, property taxes are incrementally increased. The taxes derived from this increase are used to pay off the debt created by the
improvement of infrastructure or other public improvements. Once the needed funds are recovered, taxes are returned to their original rate, and the TIF zone is dissolved (Mandleker et al. 1980, p3).

The overall goal of TIFs is to create an increase in economic development within a specific area of a community (Anderson and Wassmer 2000, p8; Johnson and Man 2001, p87, 103). Additional goals of TIF programs include “creating jobs and increasing the demand for labor by encouraging new businesses to locate in the targeted blighted area (Johnson and Man 2001, p88).

Tax increment financing, however, differs from other tax incentives, like tax abatement, in that it is generally used in the beginning stages of economic development. The focus of TIF is to attract future economic development into the TIF zones by making improvements such as needed infrastructure (Johnson and Man 2001, p88). The use of TIF as an incentive is geared to produce public good (Carroll 2003, p62). With these improvements, the TIF zone should appear more attractive to prospective businesses and increase economic activity (Johnson and Man 2001, p106). Municipalities often use TIF as a starting point to influence the location decision of businesses. Other means of inducing economic development include financing options municipalities use to fund economic development projects such as industrial development revenue bonds.

**Industrial Development Revenue Bonds**

Industrial development revenue bonds (IDBs) are tax-exempt bonds sold by a city. Bond revenues are used to fund incentives for manufacturing and industrial

---

10 See, for example: Anderson and Wassmer 2000, p8; and Carroll 2003, p65; and Johnson and Man 2001, p15.
development projects (Anderson and Wassmer 2000, p5; Walzer and P’ng 1995, p132). The revenue created by the business benefiting from the IDBs backs the bonds (Anderson and Wassmer 2000, p5). IDBs allow private businesses to make use “of the tax-exempt status granted municipal debt (Anderson and Wassmer 2000, p5).

The main objective of industrial development revenue bonds is to incite prospective businesses to locate their operations within a municipality (Thomas 1982, as cited in Anderson and Wassmer 2000, p221). According to Rasmussen et al (1984, p20), IDBs appear highly valuable to prospective businesses when comparing costs to benefits. The ratio of government costs to the benefits of the firm is highly favorable to the firm (Rasmussen et al 1984, p20).

**Loan Guarantees**

Often, loan guarantees are offered, “to increase jobs, income, and the local tax base” (Blankenship 1998, p59). Municipalities guarantee loans to help businesses gain the funds necessary to locate in the area, and banks lower normally high interest rates because of the assurance of recouping the loan amount from the city (Brealey and Myers 2000, p696). Loan Guarantees make capital available to prospective businesses at a subsidized price (Rasmussen et al 1984, p21). As a result of the recession in the 1980s, banks are more reluctant to make long-term, fixed rate loans to small businesses (Epes 1988, p157). Thus, municipalities provide loan guarantees to both comfort banks as well as get business money needed to operate.

Loan guarantees are, however, more risky than most other incentives. Should the

---

11 Usually, only a portion of the loan is guaranteed, municipalities in Northwest Michigan generally only guarantee 25% of the loan (Blankenship 1998, p59; Li 1998, p40).
business not make payment on their loan, the payments default onto the guaranteeing municipality (Blankenship 1998, p60). While municipalities have the ability to guarantee loans of any amount, generally in the millions, smaller municipalities do not usually have the revenue to guarantee such loans (Blankenship 1998, p60).  

**Conceptual Framework**

A conceptual framework provides a structure that allows the researcher to organize and describe the goals of economic development and incentives (Shields 1998, p57). The purpose of this research is descriptive. The research describes the goals of economic development, incentives, and the connection between the two. The conceptual framework used is Descriptive Categories. Three groups of Descriptive Categories are identified. **Table 2.1** shows the linkage between the descriptive categories for the goals of economic development and the literature. The goals are attract target industry, employment opportunities, increase tax revenue, and increase economic activity. **Table 2.2** shows the linkage between the descriptive categories for incentives and the literature. These categories include tax abatement, tax increment financing, industrial development revenue bonds, and loan guarantees.

---

12 From an interview with City of San Marcos, Texas City Manager Dan O’Leary in January 2005
Table 2.1 *Linkages of Descriptive Categories for Economic Development Goals to Literature Sources*

<table>
<thead>
<tr>
<th>Conceptual Framework: Economic Development Goals</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elements</td>
<td></td>
</tr>
</tbody>
</table>
| Attract Target Industry                          | Anderson and Wassmer 2000  
Hofer 2003  
Black 1991  
Rasmussen et al 1984 |
| Employment Opportunities                        | Anderson and Wassmer 2000  
Hofer 2003  
Black 1991 |
| Increase Tax Revenue                             | Blair 1995  
Blakely and Bradshaw 2002 |
| Increase Economic Activity                       | Anderson and Wassmer 2000  
Blair 1995  
Fieock 1988 |

Table 2.2 *Linkages of Descriptive Categories for Economic Development Incentives to Literature Sources*

<table>
<thead>
<tr>
<th>Conceptual Framework: Economic Development Incentives</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elements</td>
<td></td>
</tr>
</tbody>
</table>
| Tax Abatement                                         | Anderson and Wassmer 2000  
Hofer 2003  
Black 1991  
Mandleker et al 1980 |
| Tax Increment Financing                               | Anderson and Wassmer 2000  
Black 1991  
Carroll 2003  
ICMA 1990  
Johnson and Man 2001 |
| Industrial Development Revenue Bonds                 | Anderson and Wassmer 2000  
Rasmussen et al 1984  
Walzer and P'ng 1995 |
| Loan Guarantees                                      | Blankenship 1998  
Brealey and Myers 2000  
Epes 1988  
Li 1998  
Rasmussen 1984 |

Table 2.3 provides the matrix that shows the connection between the two categories. Incentives are tools to facilitate economic development, and their success is necessary for the goals of economic development to be met. Hence, the four economic development goals act as criteria for determining the success of incentives.
Table 2.3 *Connecting Conceptual Frameworks*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank (1-4)</td>
<td>Rank (1-4)</td>
<td>Rank (1-4)</td>
<td>Rank (1-4)</td>
<td>Rank (1-4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank (1-4)</td>
<td>Rank (1-4)</td>
<td>Rank (1-4)</td>
<td>Rank (1-4)</td>
<td>Rank (1-4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank (1-4)</td>
<td>Rank (1-4)</td>
<td>Rank (1-4)</td>
<td>Rank (1-4)</td>
<td>Rank (1-4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank (1-4)</td>
<td>Rank (1-4)</td>
<td>Rank (1-4)</td>
<td>Rank (1-4)</td>
<td>Rank (1-4)</td>
</tr>
</tbody>
</table>

**Chapter Summary**

Economic development and the goals of such policies have been discussed. Four goals of economic development are identified which include: attracting target industry, employment opportunities, increased tax revenue, and increased economic stability. Their relationship is cyclical in nature. A discussion of why these goals are ideal criteria through which the effectiveness of economic development incentives can be assessed followed. This is followed by a discussion of economic development incentives and their history. Included in this chapter, was a discussion of why municipalities use incentives as tools. Tax abatement, tax increment financing, industrial development revenue bonds, and loan guarantees are the four types of incentives discussed. The relationships between the goals and the incentives, while discussed, can be seen through the presented conceptual framework. The next chapter will discuss the methodology used for this research.
Chapter 3: Methodology

Chapter Purpose

This chapter pulls together the literature with the actual study. The descriptive categories from the conceptual framework, presented in Chapter 2, are operationalized. Additionally, the research technique, the unit of analysis, population and statistics are described.

Table 3.1 expresses how each of the descriptive categories is operationalized into survey questions, allowing for measurable responses. Each economic development incentive’s ability to meet each goal was measured by a survey question as well as one question addressing the best incentive for each goal.

Research Technique

Survey research is the type of research method used for this project. Texas City Managers were surveyed to assess their perspectives on the success of incentives in meeting the goals of economic development. This attitudinal survey research is utilized as expert opinion on this subject (Shields 1998). The strength of survey research stems from its unobtrusive nature as respondents can complete the questionnaire items at their convenience (Salant and Dillman 1994, p9 as cited in Jeffers 2003, p62). Babbie (2004, p243) adds that “surveys are excellent vehicles for measuring attitudes … in a large population” such as City Managers in Texas.

Questionnaire items assess the strength of the connection between incentives and economic development goals. Questionnaire statements are particularly useful in determining “the extent to which respondents hold a particular attitude or perspective”
(Babbie 2004, p244). Each question addresses an incentive’s ability to achieve one of the goals of economic development. Questionnaire items were pre-tested by the City Manager of San Marcos, Texas and his administrative staff. Pre-testing was conducted because it insures protection from errors that could result from poorly written questions (Babbie 2004, p256). Some of the questionnaire items were presented in reverse form\textsuperscript{13}. This was done to maintain the attention of respondents throughout the questionnaire. In order to express the means through which to operationalize the descriptive categories, the actual survey items are provided in Appendix A. Table 3.2 Presents the Response Code and Scales used to measure the survey responses. Here, a Likert-type scale is used. This scale is used in order “to judge the relative strength of agreement intended by various respondents” (Babbie 2004, p169). Appendix A Provides an example of the Questionnaire used. The online survey engine “SurveyMonkey.Com” was used to distribute the survey.\textsuperscript{14}

Table 3.1 Operationsalization of the Conceptual Framework

<table>
<thead>
<tr>
<th>Goal</th>
<th>Incentive</th>
<th>Survey Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1: Attract Target Industry</td>
<td>Tax Abatement</td>
<td>SQ1: Giving Tax Abatements leads to an increase in new businesses in a municipality.</td>
</tr>
<tr>
<td></td>
<td>Tax Increment Financing</td>
<td>SQ 2: Using Tax Increment Financing leads to an increase in new businesses in a municipality.</td>
</tr>
<tr>
<td></td>
<td>Industrial Development Revenue Bonds</td>
<td>SQ 3: There is a decrease in new businesses when a municipality sells Industrial Development Revenue Bonds.</td>
</tr>
<tr>
<td></td>
<td>Loan Guarantees</td>
<td>SQ 4: Providing Loan Guarantees successfully leads to an increase in new businesses in a municipality.</td>
</tr>
<tr>
<td></td>
<td>All Incentives</td>
<td>SQ 5: Which Incentive is most successful in creating Business Growth?</td>
</tr>
</tbody>
</table>

\textsuperscript{13} For example, see survey question #3.
\textsuperscript{14} SurveyMonkey.Com can be accessed by visiting their website: www.surveymonkey.com
<table>
<thead>
<tr>
<th>Goal 2: Employment Opportunities</th>
<th>Tax Abatement</th>
<th>SQ 6: There is a decrease in employment opportunities when a municipality gives tax abatements.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Increment Financing</td>
<td>SQ 7: Using Tax Increment Financing creates employment opportunities in a municipality.</td>
<td></td>
</tr>
<tr>
<td>Industrial Development Revenue Bonds</td>
<td>SQ 8: Selling Industrial Development Revenue Bonds creates employment opportunities in a municipality.</td>
<td></td>
</tr>
<tr>
<td>Loan Guarantees</td>
<td>SQ 9: Providing Loan Guarantees creates employment opportunities in a municipality.</td>
<td></td>
</tr>
<tr>
<td>All Incentives</td>
<td>SQ 10: Which Incentive is most successful in creating Employment Opportunities?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal 3: Increase Tax Revenue</th>
<th>Tax Abatement</th>
<th>SQ 11: Giving Tax Abatements results in an increase in a municipality’s tax revenue.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Increment Financing</td>
<td>SQ 12: Using Tax Increment Financing results in an increase in a municipality’s tax revenue.</td>
<td></td>
</tr>
<tr>
<td>Industrial Development Revenue Bonds</td>
<td>SQ 13: Selling Industrial Development Revenue Bonds results in an increase in a municipality’s tax revenue.</td>
<td></td>
</tr>
<tr>
<td>Loan Guarantees</td>
<td>SQ 14: There is a decrease in tax revenue when a municipality provides loan guarantees.</td>
<td></td>
</tr>
<tr>
<td>All Incentives</td>
<td>SQ15: Which Incentive is most successful in Increasing Tax Revenue?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal 4: Increase Economic Activity</th>
<th>Tax Abatement</th>
<th>SQ 16: Giving Tax Abatement results in an increase in a municipality’s economic activity.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Increment Financing</td>
<td>SQ 17: There is a decrease in economic activity when a municipality uses Tax Increment Financing.</td>
<td></td>
</tr>
<tr>
<td>Industrial Development Revenue Bonds</td>
<td>SQ 18: Selling Industrial Development Revenue Bonds results in an increase in a municipality’s economic activity.</td>
<td></td>
</tr>
<tr>
<td>Loan Guarantees</td>
<td>SQ 19: Providing Loan Guarantees results in an increase in a municipality’s economic activity.</td>
<td></td>
</tr>
<tr>
<td>All Incentives</td>
<td>SQ 20: Which Incentive is most successful in Increasing Economic Activity?</td>
<td></td>
</tr>
</tbody>
</table>
Table 3.2 *Response Code and Scales*

<table>
<thead>
<tr>
<th>Response Code</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>4</td>
</tr>
<tr>
<td>Agree</td>
<td>3</td>
</tr>
<tr>
<td>Disagree</td>
<td>2</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>1</td>
</tr>
<tr>
<td>Undecided</td>
<td>5</td>
</tr>
</tbody>
</table>

**Unit of Analysis**

The unit of analysis for this research is city managers in Central Texas. Literature establishes that “scholars generally measure local behavior by surveying officials in a sample of cities” (Lewis 2002, p147). As the city manager is both hired and fired by the City Council, individuals in this position are often intimately involved in important policy making and implementation (Lewis 2002, p148). City managers are the primary actors in balancing public interests and decision makers while also having a heavy hand in the overall path of a municipality’s affairs (Watson and Hassett 2003, p12).

**Population and Sample**

The population for this research is Central Texas City Managers. The non-profit organization Texas City Management Association (TCMA) maintains current listings of city managers as well as divides them into geographical regions. The population for this research consists of TCMA regions seven and eight. While TCMA provides the most comprehensive list of Texas city managers, not all municipalities in these regions have manager-council type governments or their city managers are not registered with TCMA, and as such were not included on the list. Appendix B provides maps identifying all ten TCMA regions as well as the two used as the population (Regions 7 and 8). By limiting the population to two regions, the sampling frame is kept to a manageable size allowing for a more accurate interpretation of the perspectives of Central Texas City Managers.
The sample of returned surveys is 49, with a rate of 61.25%, a high response rate. Such high response rates allow for “less chance of significant response bias” (Babbie 2004, p261).

**Statistics**

The descriptive statistics are used to analyze the survey results. In order to describe the central tendency and range of responses, means for each survey item’s responses are calculated. Additionally, the data collected are identified using the matrix provided in Table 2.3. The use of these statistics provides a general overview of the perspectives of Central Texas City Managers on the research subject.

**Chapter Summary**

To summarize, Central Texas City Managers were surveyed in order to identify the ability of the incentives to meet the goals of economic development. The conceptual framework facilitated the creation of the survey. The following chapter, Results, describes the data collected and provides an analysis of the statistics.
Chapter 4: Results

Chapter Purpose

The purpose for this chapter is to present and discuss the results of the Central Texas City Manager survey. The findings of the survey are used to examine the connection between economic development goals and the incentives.

The descriptive statistical analysis, consisting of means and modes, produced a positive result for most of the connections. This type of analysis provides evidence that economic development goals are good indicators of the success of an incentive. A complete frequency distribution is found in Appendix C. Additionally, Appendix C provides evidence of the preferred incentive to use to reach each goal. Questionnaire items in reverse form will have the actual response as well as the positive mean provided in parenthesis below. The mode reflects the actual responses.

Description of Returned Surveys

One of the purposes of this research is to assess the perspectives of Central Texas City Managers on the success of incentives in achieving the goals of economic development. Tables 4.1 through Table 4.4 will provide the means and modes for the questionnaire items addressing the incentive’s ability to meet the goals. Table 4.5 matrix (as seen in Chapter 2 as Table 2.3) will present the ranking of each incentive based on the means. Of the eighty surveys sent out, forty-nine were returned for a response high rate of 61.25%.
## Goal 1: Attract Target Industry*

Table 4.1 *Attract Target Industry Survey Results*

<table>
<thead>
<tr>
<th>Survey Question #</th>
<th>Survey Questions</th>
<th>% Strongly Agree and Agree</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQ 1</td>
<td>Giving <strong>Tax Abatements</strong> leads to an increase in new businesses in a municipality</td>
<td>73%</td>
<td>Agree</td>
</tr>
<tr>
<td>SQ 2</td>
<td>Using <strong>Tax Increment Financing</strong> leads to an increase in new businesses in a municipality</td>
<td>75%</td>
<td>Agree</td>
</tr>
<tr>
<td>SQ 3</td>
<td>There is a decrease in new businesses when a municipality sells <strong>Industrial Development Revenue Bonds</strong>.</td>
<td>0% (66% disagreeing)</td>
<td>Disagree</td>
</tr>
<tr>
<td>SQ 4</td>
<td>Providing <strong>Loan Guarantees</strong> successfully leads to an increase in new businesses in a municipality.</td>
<td>54%</td>
<td>Agree</td>
</tr>
<tr>
<td>SQ 5</td>
<td>Which Incentive is most successful in creating Business Growth? (N = 45)</td>
<td>Tax Abatement: 62.2%</td>
<td>Tax Abatement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TIF: 26.7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>IDB: 6.7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Loan Guarantees: 4.4%</td>
<td></td>
</tr>
</tbody>
</table>

*(n = 48)*

Overall, the respondents indicated that Tax Abatements is the incentive most successful in attracting target industries (62.2%). While a strong majority of respondents agreed or strongly agreed that both Tax Abatement (73%) and Tax Increment Financing (75%) were successful in creating new businesses, there was not a large difference between the two. Respondents indicated that Industrial Development Revenue Bonds and Loan Guarantees also do create new business in a municipality, but at slightly lower majorities (66% and 54% respectively). As a whole, the responses for survey questions regarding business growth indicated that while all incentives do successfully aid in the attraction of target industry in a municipality, Tax Abatement is the most favored incentive.
Goal 2: Employment Opportunities*

Table 4.2 Employment Opportunity Survey Results

<table>
<thead>
<tr>
<th>Survey Question #</th>
<th>Survey Question</th>
<th>% Strongly Agree and Agree</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQ 6</td>
<td>There is a decrease in employment opportunities when a municipality gives Tax Abatements.</td>
<td>10% (68% disagreeing)</td>
<td>Disagree</td>
</tr>
<tr>
<td>SQ 7</td>
<td>Using Tax Increment Financing creates employment opportunities in a municipality.</td>
<td>77%</td>
<td>Agree</td>
</tr>
<tr>
<td>SQ 8</td>
<td>Selling Industrial Development Revenue Bonds creates employment opportunities in a municipality.</td>
<td>65%</td>
<td>Agree</td>
</tr>
<tr>
<td>SQ 9</td>
<td>Providing Loan Guarantees creates employment opportunities in a municipality.</td>
<td>63%</td>
<td>Agree</td>
</tr>
<tr>
<td>SQ 10</td>
<td>Which Incentive is most successful in creating Employment Opportunities? (N = 42)</td>
<td>Tax Abatement: 61.9% TIF: 26.2% IDB: 9.5% Loan Guarantees: 2.4%</td>
<td>Tax Abatement</td>
</tr>
</tbody>
</table>

*(n = 43)*

The largest majority (77%) identified Tax Increment Financing as being a successful incentive in creating employment opportunities in a municipality. While a lower percentage (68%) of respondents see Tax Abatement as successful, it is the incentive identified as, overall, the most successful incentive in creating employment opportunities at 61.9%. It is possible that the reversal of the question on tax abatement led to the difference in means. As seen in Table 4.1 Business Growth, respondents indicated that both Industrial Development Revenue Bonds and Loan Guarantees do create employment opportunities, again at lower majorities (65% and 63% respectively). Overall, a majority of respondents strongly agreed or agreed that each incentive successfully creates employment opportunities with Tax Abatement being the most successful.
Goal 3: Increase Tax Revenue*

Table 4.3 Increase Tax Revenue Survey Results

<table>
<thead>
<tr>
<th>Survey Question #</th>
<th>Survey Questions</th>
<th>% Strongly Agree and Agree</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQ 11</td>
<td>Giving <strong>Tax Abatements</strong> results in an increase in a municipality’s tax revenue.</td>
<td>72%</td>
<td>Agree</td>
</tr>
<tr>
<td>SQ 12</td>
<td>Using <strong>Tax Increment Financing</strong> results in an increase in a municipality’s tax revenue.</td>
<td>68%</td>
<td>Agree</td>
</tr>
<tr>
<td>SQ 13</td>
<td>Selling <strong>Industrial Development Revenue Bonds</strong> results in an increase in a municipality’s tax revenue.</td>
<td>70%</td>
<td>Agree</td>
</tr>
<tr>
<td>SQ 14</td>
<td>There is a decrease in tax revenue when a municipality provides <strong>Loan Guarantees</strong>.</td>
<td>5%</td>
<td>Disagree</td>
</tr>
<tr>
<td>SQ 15</td>
<td>Which Incentive is most successful in Increasing Tax Revenue? (N = 38)</td>
<td>Tax Abatement: 39.5%</td>
<td>Tax Abatement and TIF</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TIF: 36.8%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>IDB: 21.1%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Loan Guarantees: 2.6%</td>
<td></td>
</tr>
</tbody>
</table>

*(n = 40)

Unlike the other three goals, no one incentive received the overall majority for the most successful method to create Increased Tax Revenue. Tax Abatement and Tax Increment Financing were tied in being identified as most successful totaling 76.3% for the majority. Large majorities of respondents strongly agreed or agreed that Loan Guarantees, Industrial Development Revenue Bonds, and Tax Abatement all result in an increase in tax revenue (70% for both Loan Guarantee and IDB, and 72% for Tax Abatement). By a slightly lower majority, respondents identified Tax Increment Financing as successful in creating increased tax revenue. In general, the majority of respondents identified all four incentives as successful in creating an increase in tax revenue with Tax Abatement and Tax Increment Financing identified as the most preferred incentives for this goal.
**Goal 4: Increase Economic Activity**

**Table 4.4 Increase Economic Activity Survey Results**

<table>
<thead>
<tr>
<th>Survey Question #</th>
<th>Survey Questions</th>
<th>% Strongly Agree and Agree</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQ 16</td>
<td>Giving <strong>Tax Abatement</strong> results in an increase in a municipality’s economic activity.</td>
<td>86%</td>
<td>Agree</td>
</tr>
<tr>
<td>SQ 17</td>
<td>There is a decrease in economic activity when a municipality uses <strong>Tax Increment Financing</strong>.</td>
<td>2% (90% disagree)</td>
<td>Disagree</td>
</tr>
<tr>
<td>SQ 18</td>
<td>Selling <strong>Industrial Development Revenue Bonds</strong> results in an increase in a municipality’s economic activity.</td>
<td>67%</td>
<td>Agree</td>
</tr>
<tr>
<td>SQ 19</td>
<td>Providing <strong>Loan Guarantees</strong> results in an increase in a municipality’s economic activity.</td>
<td>67%</td>
<td>Agree</td>
</tr>
</tbody>
</table>
| SQ 20             | Which Incentive is most successful in Increasing Economic Activity? (N =38) | Tax Abatement: 60.5%  
TIF: 26.3%  
IDB: 7.9%  
Loan Guarantees: 5.3% | Tax Abatement |

*(n = 40)*

Tax Abatement and Tax Increment Financing were identified by respondents as successful in increasing a municipality’s economic activity by overwhelming majorities (86% and 90% respectively). Tax Abatement, however, was selected as the most successful incentive with 60.5% of respondents indicating its ability to increase economic activity. A slightly lower majority of respondents (both at 67%) strongly agreed or agreed that Industrial Development Revenue Bonds and Loan Guarantees do successfully increase economic activity. For the goal of Increased Economic Activity, respondents identified all incentives as successfully creating increases, but Tax Abatement is again the most favored incentive.

**Ranking of Successfulness**

**Table 4.5** provides rankings that identify the successfulness of the incentives for each goal. Incentives are rated 1-4 for each goal based on the means provided by the survey questions 1-4, 6-9, and 11-19. The overall successfulness of the incentives is
based on questions 5, 10, 15 and 20, which asked respondents to identify the incentive most successful in achieving each goal. As discussed in Chapter 2, this matrix aids in expressing the connection between the descriptive categories.

Table 4.5 Ranking of Successfulness

<table>
<thead>
<tr>
<th>Incentive 1: Tax Abatement</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1: Attract Target Industry</td>
<td>1</td>
</tr>
<tr>
<td>Goal 2: Employment Opportunities</td>
<td>2</td>
</tr>
<tr>
<td>Goal 3: Increase Tax Revenue</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4: Increase Economic Activity</td>
<td>4</td>
</tr>
</tbody>
</table>

While Tax Increment Financing is ranked number one for three of the four goals, Tax Abatement was consistently chosen as the most successful when compared among all of the incentives. Goal 3: Increased Tax Revenue is the only goal in which Tax Abatement did not get the overall majority as most successful incentive. In this case, Tax Abatement and Tax Increment Financing were split with only a 2.7% difference. With the exceptions of Goals 3 and 4 (where they tied), Industrial Development Revenue Bonds and Loan Guarantees are consistently ranked third and fourth respectively. It is noted that Loan Guarantees may consistently receive the lowest percent of agreement because, as discussed in Chapter 2, only larger cities with larger budgets can afford to offer them. It is quite likely that few of the City Managers surveyed have experience with cities that can offer Loan Guarantees.
Chapter Summary

The statistical analysis of the data provides evidence that all incentives are considered to be successful in meeting the goals of economic development. Some incentives, however, were identified to be more successful or favored for particular goals. Based on the results of the survey, it is concluded that Tax Abatement can be accurately ranked as the most successful incentive in meeting all four economic development goals. The next chapter summarizes the research findings and discusses the next steps for research in economic development goals and incentives.
Chapter 5: Conclusion

Chapter Purpose

This final chapter provides a summary of the research as it relates to the research purpose. The perspectives of a professional in the field will be provided in order to synthesize the data in terms of actual use. Recommendations for future related research is also included. These recommendations are based on a reflection of the research, existing scholarly literature and survey results.

Summary of Research

The purpose of this research was to (1) identify the four major goals of economic development and the four most commonly used incentives, (2) draw a connection between the goals of economic development and how they act as adequate criteria to assesses the success of an incentive, and (3) assesses the perspectives of Central Texas city managers on the success of incentives in achieving the goals of economic development. This study was explanatory in nature as no existing literature discusses which incentives were successful in accomplishing the goals of economic development.

The review of scholarly literature identified four major goals of economic development: attract target industry, employment opportunities, increase tax revenue, and increase economic activity. Four of the most commonly used incentives were isolated: tax abatement, tax increment financing, industrial development revenue bonds, and loan guarantees. These goals and incentives became the study’s descriptive categories.
In order to collect the data, incentives were gauged on their ability to meet the goals of economic development. To simplify data collection, each questionnaire item measured one incentive’s success in meeting on goal.

Central Texas city managers were selected as the unit of analysis because of their primary role in decision making for municipal projects. Of the total eighty city managers surveyed, from Texas City Managers Association regions seven and eight, 61.25% (n = 49) of the surveys were returned.

Means and the mode for each questionnaire item were provided. Analysis of the survey data identifies that each incentive is successful in meeting each goal of economic development. Table 5.1 provides a summary of the incentives’ success in meeting the goals.

**Table 5.1 Summary of Survey Results**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Incentives</th>
<th>Mean</th>
<th>Mode</th>
<th>Overall Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Growth</td>
<td>Tax Abatement</td>
<td>2.89</td>
<td>Agree</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Tax Increment Financing</td>
<td>3.05</td>
<td>Agree</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Industrial Development Revenue Bonds</td>
<td>1.74</td>
<td>Disagree</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Loan Guarantees</td>
<td>2.75</td>
<td>Agree</td>
<td>4</td>
</tr>
<tr>
<td>Employment Opportunities</td>
<td>Tax Abatement</td>
<td>1.81</td>
<td>Disagree</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Tax Increment Financing</td>
<td>3.08</td>
<td>Agree</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Industrial Development Revenue Bonds</td>
<td>2.94</td>
<td>Agree</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Loan Guarantees</td>
<td>2.75</td>
<td>Agree</td>
<td>4</td>
</tr>
<tr>
<td>Increased Tax Revenue</td>
<td>Tax Abatement</td>
<td>2.86</td>
<td>Agree</td>
<td>1 (tied)</td>
</tr>
<tr>
<td></td>
<td>Tax Increment Financing</td>
<td>2.97</td>
<td>Agree</td>
<td>1 (tied)</td>
</tr>
<tr>
<td></td>
<td>Industrial Development Revenue Bonds</td>
<td>2.94</td>
<td>Agree</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Loan Guarantees</td>
<td>2.75</td>
<td>Disagree</td>
<td>3</td>
</tr>
<tr>
<td>Increased Economic Activity</td>
<td>Tax Abatement</td>
<td>3.05</td>
<td>Agree</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Tax Increment Financing</td>
<td>1.73</td>
<td>Disagree</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Industrial Development Revenue Bonds</td>
<td>2.91</td>
<td>Agree</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Loan Guarantees</td>
<td>2.75</td>
<td>Agree</td>
<td>4</td>
</tr>
</tbody>
</table>

Over 50% of all respondents either strongly agreed or agreed that all four incentives successfully meet each of the economic development goals. Tax Abatement was

---

15 See Table 3.2 for Response Code and Scales.
16 While the mode for some of these items is “Disagree” each of these were questionnaire items that were reversed. As such, a mode of “Disagree” is equal to a mode of “Agree.”
identified from among all of the incentives as the most successful in creating Business Growth, Employment Opportunities and Increased Economic Activity. It tied with Tax Increment Financing as the most successful incentive in creating Increased Tax Revenue.

**Perspectives of a Professional**

City Manager of San Marcos, Texas, Dan O’Leary, provides the following perspectives in response to this study\(^\text{17}\). O’Leary provides discussion on the impact of this research for city managers in their role of implementing economic development projects and their use of incentives. Additionally, as a result of reading this study, O’Leary supplies further research questions as well as insight on the future relationship between city managers and economic development incentives.

“Economic development for a community is increasingly becoming a fundamental function of municipal government. Enabling legislation by the State of Texas provides communities the tools described in this project. This research demonstrates that City Managers in Texas agree on the effectiveness of these tools in meeting economic development goals.

It is most apparent by this research that the tax abatement is the tool of choice by city managers with tax increment financing a close second. My experience leads me to believe that tax abatements are more widely used, as it is the least complicated to administer of the two. The administration procedures of both are delineated in statute and are very different.

Economic development incentives have their detractors in every community. The belief that public money used to attract business is a

\(^{17}\) The perspectives of Dan O’Leary are derived from an interview conducted on April 4, 2005.
form of income redistribution from the poor to the rich or a form of “corporate welfare”.  This research is helpful in describing the belief that incentives do in fact help communities reach their economic goals.  This research can provide city managers with evidence that they are not alone in their beliefs.

City managers act in a vacuum, that is, the development incentive decision a city manager proposes is made irrespective of any area outside the city limits.  A larger question for research may be this:  Do city managers believe that they must provide incentives to create economic development?  Or would economic development occur naturally as a function of the free market if no city were allowed to provide incentives with public money?

A second larger question might be this:  Do city managers believe that they must provide incentives to compete with other cities for the same economic development prospects?  If the answer to this question were yes (and I suspect it would be), this competitive environment would push each local municipality to extremes to provide incentives to meet their municipality’s goals at the expense of their neighboring community.  This would create enormous leverage for mobile capital to move from community to community seeking out the best public support for their private venture.

These questions go far beyond the scope of this research, but are important questions. The research of this project, nevertheless, demonstrates the importance Texas city managers’ place on the incentives made available to them by the state of Texas. These important decisions are made everyday by city managers, and the tendency is for those decisions to increase in the future.”

**Next Steps for Research**

Because this research is exploratory in nature, future research on economic development and incentives has room to grow and improve. There are three major steps, in addition to those suggested in the previous section, which can transform the data collected in this study into more concise and usable implications for economic development projects.
Step one takes into consideration that this study surveyed Central Texas City Managers. The population chosen limited the municipalities that could be surveyed. Future studies should include all cities rather than just those with manager-council systems. Almost every municipality engages in economic development in some form, and as such, the study should not be constrained by the type of management municipalities use.

Similarly, step two moves to allow for a more concise survey sample. This study made no differentiation between cities, simply surveying based on TCMA region. The type of incentive and the frequency of use differ greatly between municipalities. This difference is due to largely because of population and budgetary differences. Municipalities of similar size and budget should be separated and the data collected compared among their peers. In doing so the analysis could be more accurately used as it applies to those municipalities with specific demographic and fiscal levels.

Lastly, step three continues to move this study to provide more specific implications. In dealing with economic development projects and the use of incentives, every situation is different. Future studies should attempt to identify common economic development situations and attempt to identify the specific incentive best suited to meet the needs of that situation. While this study concluded that all four of the most common incentives are successful in meeting the goals of economic development, the type of development, population and budget of the municipality, and level of competition are all factors that may render one incentive more successful for that particular situation.

Research is never complete, and this study provides many avenues through which future studies can branch out. Other questions that can be derived from this study
include, what length of tax abatement period is the most effective, which incentive is best for municipalities just beginning to implement economic development projects, and what effect does competition in the area have on the success of incentives? Regardless, there are many questions still left to answer.
Bibliography


Feiock, Richard C. “Local Government Economic Development Incentives and Urban Economic Growth” Public Administration Quarterly: vol 12 iss 2, pp140-150


Watson, Douglas J. and Wendy L. Hassett *Local Government Management: Current Issues and Best Practice. ASPA;* M.E.Sharpe, Amronk 2003
Appendix A: Questionnaire

Name: _________________________
City: _________________________
Title: _________________________

Economic Development and Incentives Survey

What is your level of agreement with the following statements?
Please circle the appropriate level of agreement.

Strongly Agree = SA    Agree = A    Disagree = D    Strongly Disagree = SD    Undecided = U

Goal A: Attract Target Industry

1. Giving Tax Abatements leads to an increase in new businesses in a municipality.   SA A D SD U
2. Using Tax Increment Financing leads to an increase in new businesses in a municipality.   SA A D SD U
3. There is a decrease in new businesses when a municipality sells Industrial Development Revenue Bonds.   SA A D SD U
4. Providing Loan Guarantees successfully leads to an increase in new businesses in a municipality.   SA A D SD U
5. Which Incentive is most successful in creating Business Growth?   Tax Abatement   Tax Increment Financing   Industrial Development Revenue Bonds   Loan Guarantees

Goal B: Employment Opportunities

6. There is a decrease in the creation of employment opportunities when a municipality gives Tax Abatements.   SA A D SD U
7. Using Tax Increment Financing creates employment opportunities in a municipality.   SA A D SD U
8. Selling Industrial Development Revenue Bonds creates employment opportunities in a municipality.   SA A D SD U
9. Providing Loan Guarantees creates employment opportunities in a municipality.   SA A D SD U
10. Which Incentive is most successful in creating Business Growth?   Tax Abatement   Tax Increment Financing   Industrial Development Revenue Bonds   Loan Guarantees
Goal C: Increased Tax Revenue

11 Giving Tax Abatements leads to an increase in a municipality's tax revenue.

12 Using Tax Increment Financing leads to an increase in a municipality's tax revenue.

13 Selling Industrial Development Revenue Bonds results in an increase in a municipality's tax revenue.

14 There is a decrease in tax revenue when a municipality provides Loan Guarantees.

15 Which Incentive is most successful in creating an Increase in Tax Revenue?

<table>
<thead>
<tr>
<th>Incentive</th>
<th>Tax Abatement</th>
<th>Tax Increment Financing</th>
<th>Industrial Development Revenue Bonds</th>
<th>Loan Guarantees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Abatement</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Tax Increment Financing</td>
<td></td>
<td></td>
<td></td>
<td>U</td>
</tr>
<tr>
<td>Industrial Development Revenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue Bonds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loan Guarantees</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Goal D: Increased Economic Activity

16 Giving Tax Abatements leads to an increase in new businesses in a municipality.

17 Using Tax Increment Financing leads to an increase in new businesses in a municipality.

18 There is a decrease in new businesses when a municipality sells Industrial Development Revenue Bonds.

19 Providing Loan Guarantees successfully leads to an increase in new businesses in a municipality.

20 Which Incentive is most successful in creating Business Growth?

<table>
<thead>
<tr>
<th>Incentive</th>
<th>Tax Abatement</th>
<th>Tax Increment Financing</th>
<th>Industrial Development Revenue Bonds</th>
<th>Loan Guarantees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Abatement</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>Tax Increment Financing</td>
<td></td>
<td></td>
<td></td>
<td>U</td>
</tr>
<tr>
<td>Industrial Development Revenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue Bonds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loan Guarantees</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional comments are welcome in the space below. Thank you for your time and participation.

**Name, City, and Title will be used only for statistical analysis and record keeping. Respondents will not be identified individually.
Appendix B: TCMA Regions

TCMA Regional Breakdown

TCMA Region 7

TCMA Region 8
### Appendix C: Statistics

#### Attract Target Industry

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Undecided</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQ1: Giving Tax Abatements leads to an increase in new businesses in a municipality.</td>
<td>10% (5)*</td>
<td>63% (30)</td>
<td>17% (8)</td>
<td>2% (1)</td>
<td>8% (4)</td>
</tr>
<tr>
<td>SQ 2: Using Tax Increment Financing leads to an increase in new businesses in a municipality.</td>
<td>15% (7)</td>
<td>60% (29)</td>
<td>10% (5)</td>
<td>0% (0)</td>
<td>15% (7)</td>
</tr>
<tr>
<td>SQ 3: There is a decrease in new businesses when a municipality sells Industrial Development Revenue Bonds.</td>
<td>0% (0)</td>
<td>0% (0)</td>
<td>49% (23)</td>
<td>17% (8)</td>
<td>34% (16)</td>
</tr>
<tr>
<td>SQ 4: Providing Loan Guarantees successfully leads to an increase in new businesses in a municipality.</td>
<td>4% (2)</td>
<td>50% (24)</td>
<td>19% (9)</td>
<td>2% (1)</td>
<td>25% (12)</td>
</tr>
<tr>
<td>SQ 5: Which Incentive is most successful in creating Business Growth?</td>
<td>TA 62.2% (28)</td>
<td>TIF 26.7% (12)</td>
<td>IDB 6.7% (3)</td>
<td>LG 4.4% (2)</td>
<td></td>
</tr>
</tbody>
</table>

* Numbers in () are the actual number of respondents indicating that level of agreement

#### Employment Opportunities

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Undecided</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQ 6: There is a decrease in employment opportunities when a municipality gives tax abatements.</td>
<td>2% (1)</td>
<td>8% (3)</td>
<td>40% (16)</td>
<td>28% (11)</td>
<td>22% (9)</td>
</tr>
<tr>
<td>SQ 7: Using Tax Increment Financing creates employment opportunities in a municipality.</td>
<td>14% (6)</td>
<td>63% (27)</td>
<td>7% (3)</td>
<td>0% (0)</td>
<td>15% (7)</td>
</tr>
<tr>
<td>SQ 8: Selling Industrial Development Revenue Bonds creates employment opportunities in a municipality.</td>
<td>5% (2)</td>
<td>60% (26)</td>
<td>9% (4)</td>
<td>0% (0)</td>
<td>26% (11)</td>
</tr>
<tr>
<td>SQ 9: Providing Loan Guarantees creates employment opportunities in a municipality.</td>
<td>5% (2)</td>
<td>58% (25)</td>
<td>16% (7)</td>
<td>0% (0)</td>
<td>21% (9)</td>
</tr>
<tr>
<td>SQ 10: Which Incentive is most successful in creating Employment Opportunities?</td>
<td>TA 61.9% (26)</td>
<td>TIF 26.2% (11)</td>
<td>IDB 9.5% (4)</td>
<td>LG 2.4% (1)</td>
<td></td>
</tr>
</tbody>
</table>

#### Increased Tax Revenue

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Undecided</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQ 11: Giving Tax Abatements results in an increase in a municipality’s tax revenue.</td>
<td>12% (5)</td>
<td>60% (24)</td>
<td>15% (6)</td>
<td>5% (2)</td>
<td>8% (3)</td>
</tr>
<tr>
<td>SQ 12: Using Tax Increment Financing results in an increase in a municipality’s tax revenue.</td>
<td>21% (8)</td>
<td>47% (18)</td>
<td>18% (7)</td>
<td>3% (1)</td>
<td>11% (4)</td>
</tr>
<tr>
<td>SQ 13: Selling Industrial Development Revenue Bonds results in an increase in a municipality’s tax revenue.</td>
<td>5% (2)</td>
<td>65% (26)</td>
<td>10% (4)</td>
<td>0% (0)</td>
<td>20% (8)</td>
</tr>
<tr>
<td>SQ 14: There is a decrease in tax revenue when a municipality provides loan guarantees.</td>
<td>0% (0)</td>
<td>5% (2)</td>
<td>60% (24)</td>
<td>10% (4)</td>
<td>25% (10)</td>
</tr>
<tr>
<td>SQ15: Which Incentive is most successful in Increasing Tax Revenue?</td>
<td>TA 39.5% (15)</td>
<td>TIF 36.8% (14)</td>
<td>IDB 21.1% (8)</td>
<td>LG 2.6% (1)</td>
<td></td>
</tr>
</tbody>
</table>

---

48
### Increased Economic Activity

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Undecided</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQ 16: Giving Tax Abatement results in an increase in a municipality’s economic activity.</td>
<td>18% (7)</td>
<td>68% (27)</td>
<td>8% (3)</td>
<td>2% (1)</td>
<td>5% (2)</td>
</tr>
<tr>
<td>SQ 17: There is a decrease in economic activity when a municipality uses Tax Increment Financing.</td>
<td>0% (0)</td>
<td>2% (1)</td>
<td>62% (25)</td>
<td>28% (11)</td>
<td>8% (3)</td>
</tr>
<tr>
<td>SQ 18: Selling Industrial Development Revenue Bonds results in an increase in a municipality’s economic activity.</td>
<td>5% (2)</td>
<td>62% (25)</td>
<td>12% (5)</td>
<td>0% (0)</td>
<td>20% (8)</td>
</tr>
<tr>
<td>SQ 19: Providing Loan Guarantees results in an increase in a municipality’s economic activity.</td>
<td>5% (2)</td>
<td>62% (25)</td>
<td>15% (6)</td>
<td>0% (0)</td>
<td>18% (7)</td>
</tr>
<tr>
<td>SQ 20: Which Incentive is most successful in Increasing Economic Activity?</td>
<td>TA 60.5% (23)</td>
<td>TIF 26.3% (10)</td>
<td>IDB 7.9% (3)</td>
<td>LG 5.3% (2)</td>
<td></td>
</tr>
</tbody>
</table>