

## THE ECONOMICS OF THE U.S. STATE AND LOCAL ECONOMIC DEVELOPMENT BUSINESS

Marshall J. Horton

*Region Bank Chair of Economics and Finance, Ouachita Baptist University, USA.*

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**Abstract:** *The Economic Development business in the U.S. appears to be alive and well with competition between states and municipalities for firms to relocate to areas of developmental advantage. The sustainability of the approach, as it is commonly practiced, has been called into question. Alternative approaches, such as a life cycle model of the industry and Jacobs' local import replacement, may provide some stability for what has become a large, American, industry. Above all, academic economists may want to continue to steer clear of this industry.*

**Keywords:** *local economic development, import replacement, clawback provisions.*

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### I. INTRODUCTION

Since the 1980s, the United States has had a major growth industry: local economic development. Strictly a function of government, this industry typically is supported through the granting of incentives for the establishment or relocation of businesses in local areas. The rationale for this activity is that such businesses bring jobs to an area and thereby increase the tax base for local governments and taxing authorities.

This idea is not new. The eminent economic historian, Jonathan R.T. Hughes, documented examples of government-business partnerships since the beginning of the Republic in the form of land grants and other subsidies. In particular, the State of New York was notably successful in its sponsorship of the Erie Canal in the 1820s (Hughes, 1991, pp. 70-71).

As a typical example of the sales pitch for modern-day economic development activity, consider the following paragraphs concerning municipalities in Texas from a 1994 *City & County Financial Management* article entitled "Cities Attract, Expand Commerce Through Economic Development Efforts":

*If you build it, they will come. We're talking soccer fields, like the one they're planning in the City of Cedar Hill and the City of Hurst. Whether it's an industrial park, a soccer field, or expansions to a city park, many cities are hoping that businesses will come – and stay – as they move forward with economic development projects. As Texas cities vie for the attention – and retention – of new and expanding business enterprises, additional local sales tax revenues are helping them in the process.*

*Cities have been able to form economic development corporations since 1979 to help them in their efforts to attract business. To further stimulate the economy in 1989, the Legislature also provided city voters with the option to adopt a dedicated sale and use tax to fund many industrial development projects.*

*This tax, better known as the economic development sales tax, is used to provide eligible cities with funds to attract new businesses, assist expanding enterprises and create new job opportunities.<sup>1</sup>*

Criticism of such activity, once muted, has been growing throughout the country. The nonprofit Mackinac Center, an academic research organization in Michigan, has two weblogs devoted to ferreting out waste, inefficiency, and outright fraud in economic development.<sup>2</sup> In addition to think-tanks such as the Land Policy Institute (Sands et al., 2007), a preponderance of other studies have reached negative conclusions about

state and local economic development spending (Farrell, 1996; Peters and Fisher, 2004; Peters, 2004; Phillips and Goss, 1995; Rolnick and Burstein, 1995; Schwartz et al., 2008; Story, 2012; and Tomaka, 2015). The goal of “economic development,” although rarely ever precisely defined by those agencies which are charged with providing it, is assumed to be of such primary importance that it should be a spending priority, providing a bandwagon effect. In support of such activity, economics can be used as a means to intimidate opponents, stifle discussion and enact tax increases. This paper seeks to examine the economic justifications for economic development as it is currently practiced in this country, investigate the sustainability of the practice, and explore new options for consideration.<sup>3</sup>

It may seem strange that the term “economic development,” as it is commonly used in the United States, was not begun (nor has it been embraced) by economists. The goal of this paper is to explore the history, goals, and accomplishments of such economic development from an economist’s perspective, establishing its consequences and suggesting alternatives.

## **II. THE LEADERS AND THE LAGGARDS**

States differ dramatically in their approaches to economic development. Some states have extensive networks of special agencies that collect sales taxes and provide subsidies of various sorts for business relocation and other activities. Others have virtually no such apparatus at all. As alluded to earlier, Texas is far-and-away the leader in economic development efforts as they are commonly understood by economic developers.<sup>4</sup> The Comptroller of the State of Texas website has numerous incentives listed that the state allows municipalities to make available for attracting industries from other states.<sup>5</sup> Although there are many other programs in existence, those with descriptions available at the Comptroller’s website (as of this month) fall into four basic categories: Job/Capital Investment Creation; Research, Commercialization, Venture Capital; Processing, Warehousing, and Storage; and Workforce Training. The Incentive Programs within each general objective are as follows:

- I. Job/Capital Investment Creation
  - A. Texas Economic Development Act (Texas Tax Code Chapter 313)
  - B. Texas Enterprise Fund (Texas Government Code § 481.078)
  - C. Economic Development Refund (Texas Tax Code § 111.301 – 111.304)
  - D. Texas Enterprise Zone Program (Texas Government Code Chapter 2303)
  - E. Texas Moving Image Industry (Texas Government Code § 485.022)
  
- II. Research, Commercialization, Venture Capital
  - A. Texas Emerging Tech Fund (Texas Government Code § 490.101)
  - B. CAPCO (Texas Insurance Code § 228.001 – 228.353)
  
- III. Processing, Warehousing, and Storage
  - A. Freeport Exemptions (Texas Tax Code § 11.251)
  
- IV. Workforce Training
  - A. Skills Development Fund (Texas Labor Code § 303.003)

Representing just a fraction of the funds spent at the state and local levels for economic development in Texas, Table 1 and the accompanying notes are instructive.

**Table 1.** Local economic development incentives by state

Rank	State	Economic development spending	Spending per capital	Spending per \$ of state budget
1	TX	\$19,100,000,000	\$759	\$0.51
2	MI	\$6,650,000,000	\$672	\$0.30
3	PA	\$4,840,000,000	\$381	\$0.18
4	CA	\$4,170,000,000	\$112	\$0.05
5	NY	\$4,060,000,000	\$210	\$0.07
6	FL	\$3,980,000,000	\$212	\$0.16
7	OH	\$3,240,000,000	\$281	\$0.11
8	WA	\$2,350,000,000	\$349	\$0.15
9	MA	\$2,260,000,000	\$345	\$0.07
10	OK	\$2,190,000,000	\$584	\$0.37
11	LA	\$1,790,000,000	\$394	\$0.21
12	TN	\$1,580,000,000	\$249	\$0.14
13	WV	\$1,570,000,000	\$845	\$0.37
14	WI	\$1,530,000,000	\$268	\$0.10
15	IL	\$1,510,000,000	\$117	\$0.05
16	AZ	\$1,470,000,000	\$230	\$0.16
17	KY	\$1,410,000,000	\$324	\$0.15
18	GA	\$1,400,000,000	\$144	\$0.08
19	NE	\$1,390,000,000	\$763	\$0.39
20	VA	\$1,290,000,000	\$161	\$0.08
21	KS	\$1,010,000,000	\$355	\$0.17
22	CO	\$995,000,000	\$198	\$0.13
23	IN	\$921,000,000	\$142	\$0.06
24	SC	\$896,000,000	\$194	\$0.15
25	OR	\$865,000,000	\$226	\$0.12

26	CT	\$860,000,000	\$241	\$0.04
27	AK	\$704,000,000	\$991	\$0.11
28	NJ	\$678,000,000	\$77	\$0.02
29	NC	\$660,000,000	\$69	\$0.03
30	MD	\$554,000,000	\$96	\$0.04
31	ME	\$504,000,000	\$379	\$0.17
32	AR	\$431,000,000	\$148	\$0.09
33	MS	\$416,000,000	\$140	\$0.09
34	VT	\$407,000,000	\$650	\$0.31
35	RI	\$356,000,000	\$338	\$0.11
36	ID	\$338,000,000	\$216	\$0.13
37	AL	\$277,000,000	\$58	\$0.04
38	HI	\$262,000,000	\$192	\$0.05
39	NM	\$253,000,000	\$123	\$0.04
40	MN	\$239,000,000	\$45	\$0.01
41	IA	\$223,000,000	\$73	\$0.04
42	UT	\$207,000,000	\$75	\$0.04
43	MT	\$101,000,000	\$102	\$0.05
44	MO	\$96,000,000	\$16	\$0.01
45	WY	\$89,000,000	\$159	\$0.06
46	DE	\$43,100,000	\$48	\$0.01
47	NH	\$39,000,000	\$30	\$0.03
48	NV	\$33,400,000	\$12	\$0.01
49	ND	\$32,900,000	\$49	\$0.01
50	SD	\$27,800,000	\$34	\$0.02

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Source: Constructed from *New York Times* interactive database estimates

<http://www.nytimes.com/interactive/2012/12/01/us/government-incentives.html>

**Table 2.** Local economic development incentives by industry

<b>Industry</b>	<b>1st</b>	<b># of States</b>	<b>2nd</b>	<b># of States</b>	<b>3rd</b>	<b># of States</b>
Agriculture	\$2,111,900	10	\$5,101,400	17	\$603,880	6
Aircraft			\$26,500	1	\$197,000	1
Alternative Energy	\$12,200	1	\$5,451	2	\$119,300	4
Biotech					\$61,300	1
Consumers			\$5,950	1		
Defense	\$218,000	1				
Electricity			\$492,000	1	\$20,400	1
Film	\$7,520	1	\$1,004,852	10	\$126,620	7
Finance	\$121,600	2	\$34,300	1		
Food	\$156,000	1				
Healthcare					\$77,300	1
Insurance			\$4,970	1		
Loans	\$76,100	1				
Manufacturing	\$24,452,400	20	\$889,600	6	\$368,240	6
Oil, Gas, Mining	\$1,934,300	5	\$244,500	3	\$194,300	2
Power			\$106,000	1		
Printing						
Railroads					\$16,330	2
Real Estate					\$87,100	1
Recreation					\$160	1
Rental Cars			\$37,800	1		
Retail					\$109,000	1
Shipping			\$3,000	1	\$8,380	1
Technology	\$165,600	4	\$60,000	1	\$387,250	5
Telecom					\$32,500	1
Trucking	\$83,010	2			\$18,400	1
N/A		1		3		8

Source: Constructed from *New York Times* interactive database estimates

<http://www.nytimes.com/interactive/2012/12/01/us/government-incentives.html>

**Table 3.** Local economic development incentives by type

<b>Type of Incentive</b>	<b>1st</b>	<b># of States</b>	<b>2nd</b>	<b># of States</b>	<b>3rd</b>	<b># of States</b>
Sales tax refund, exemptions or discounts	\$49,656,200	32	\$1,371,840	5	\$1,257,000	2
Property tax abatement	\$667,000	1	\$5,999,900	7	\$114,840	3
Corporate income tax credit, rebate/reduction	\$8,597,900	12	\$7,074,400	24	\$1,700,600	11
Cash grant, loan or loan guarantee	\$189,800	4	\$603,550	10	\$799,820	21
Free Services	\$0	0	\$2,380	1	\$129	1
Personal income tax credit	\$264,000	1	\$121,600	3	\$110,420	8
Not available		0		0		4

Source: Constructed from *New York Times* interactive database estimates

<http://www.nytimes.com/interactive/2012/12/01/us/government-incentives.html>

Table 1 ranks the fifty states in terms of total local economic development incentive spending. Compiled by the author from information made public by *The New York Times*, Table 1 looks at totals while Tables 2 and 3 tabulate the information by industry and type of incentive, respectively. It should be kept in mind that the data do not comprise the total spending for economic development, since **no centralized database is kept on such incentives**. Like insurance, economic development is regulated primarily at the state and local level, although much funding for state and local efforts comes from federal agencies or quasi-public entities such as the U.S. Department for Economic Development, the USDA Rural Development Agency, and the Federal Home Finance System.

Although the states differ within each grouping by industry (Table 2) and type of incentive (Table 3), the most popular industry for subsidization, according to *The New York Times* study, is manufacturing. The most popular type of incentive is sales tax refunds, exemptions, or discounts.

For a look at a state that has tended to lag both Texas and Michigan in terms of economic development incentives, a June, 2016, visit to an Arkansas website, <http://www.aed-arkansas.org/> was instructive. The embedded link to <http://www.aed-arkansas.org/arkansans-for-jobs-for-the-constitutional-amendment/> highlights a proposed amendment to the Arkansas constitution to be voted on by referendum to “(1) enhance the state’s ability to compete for large projects, (2) provide clear, consistent constitutional definitions, empowering cities and municipalities to participate in economic development, and (3) give cities and counties clear authority to spend local dollars for economic development projects.” The definitions are as follows:

Definitions:

- [1] Economic Development Projects – the land, buildings, furnishings, equipment, facilities, infrastructure, and improvements that are required or suitable for the development, retention, or expansion of:
  - (A) Manufacturing, production, and industrial facilities;
  - (B) Research, technology, and development facilities;
  - (C) Recycling facilities;
  - (D) Distribution centers;
  - (E) Call centers;
  - (F) Warehouse facilities;
  - (G) Job training facilities;
  - (H) Regional or national corporate headquarters facilities.
  
- [2] Economic Development Services
  - (A) Planning, marketing, and strategic advice and counsel regarding job recruitment, job development, job retention, and job expansion;
  - (B) Supervision and operation of industrial parks or other such properties;
  - (C) Negotiation of contracts for the sale or lease of industrial parks or other such properties
  
- [3] Infrastructure
  - (A) Land acquisition;
  - (B) Site preparation;
  - (C) Road and highway improvements;
  - (D) Rail spur, railroad, and railport construction;
  - (E) Water service;
  - (F) Wastewater treatment;
  - (G) Employee training which may include equipment for such purpose; and
  - (H) Environmental mitigation or reclamation.

The final plea on the circular is as follows (underlines, bolds, italics, and caps from the original):

**BOTTOM LINE: THIS AMENDMENT WILL CREATE JOBS FOR ARKANSANS**

Right now, Arkansas is at a *disadvantage*. Our constitution leaves us **OUT OF LINE with other states** in this part of the country when it comes to giving communities the ability to engage in economic development efforts. Even with strong local and legislative support for economic development policies, many cities and counties have found their job creation efforts are limited by a confusing, inconsistent Arkansas Constitution. This amendment would streamline our constitution, providing **ALL** of our cities, counties, and the state with *more and better* tools needed to help create **Jobs for Arkansans**.<sup>6</sup>

This plea places Texas' immediate neighbor to the northeast firmly in the position of *market follower*. In a very real sense, states are in different positions in an overall national industry. As further evidence, consider the second-largest state in terms of economic development incentives, Michigan, which has been trying to get *out* of the local economic development business for decades. It is no accident that Michigan was the state in which relocation and expansion incentives first saw widespread application.

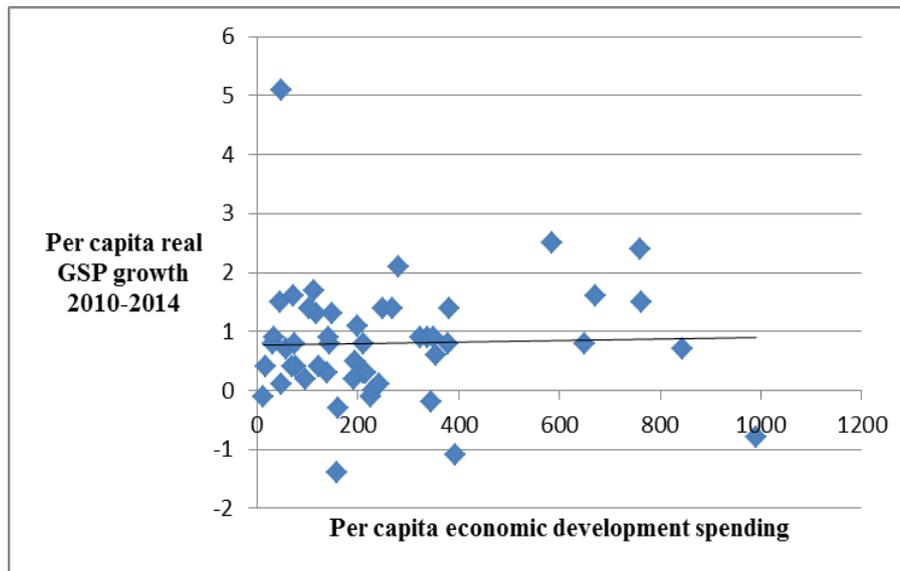
Michigan, under the Snyder administration, has been rolling back business tax credits from the years when the state was trying to keep General Motors from relocating. But many of these incentives have what is known in casualty insurance as a "long-tail," that is, they may be claimed many years after they were first offered. As property and liability insurers found during the mid-1980s (Parry and Horton, 1997), policies written on an occurrence basis rather than on a claims-made basis subject the fiduciary to large, potentially-unforeseeable liabilities (Rejda, 2003, pp. 277-288). In Michigan's case, as a senior economic development official put it, "you don't know who will take a credit or when," adding that it might suddenly be claimed after "ten years or more." Story (2012) Given Ypsilanti's lawsuit against GM over broken pledges from the 1990s to stay in Michigan rather than relocate in Arlington, Texas, it is safe to say that "economic development" is generally considered a dirty phrase in Michigan these days, as it may become some day in other states like Texas and Arkansas.

Texas spends a dollar amount equal to more than half its regular state budget on economic development incentives alone. Incomplete as Table 1 is compelled to be by necessity, it indicates how thoroughly committed to local economic development the State of Texas currently is. Michigan was too, at one time. Now the battles are to kill tourist campaigns, including the "Pure Michigan" commercials on national television for which actor Tim Allen provides the voice-overs. Is it a stretch to surmise that Texas, too, will join Michigan within a generation to voice skepticism of local economic development incentives?

Not just Texas, Michigan, and Arkansas, but many other states are fighting these battles in what has come to be known as "the war among the states" (Rolnick and Burstein, 1995). In none of those states has any economic incentive been proven to create any more jobs than the same funds would have created in the absence of governmental economic development efforts. However, there is ample evidence that a *select few* interests receive a dramatic positive economic impact from such spending.<sup>7</sup>

Bobby Hitt, South Carolina's Secretary of Commerce as of 2012, lobbied the state for \$130 million for his former employer, BMW. He viewed it as a good investment for raising "tax revenues in the long-run." (Story, 2012) But Hitt has neither the credentials nor training to evaluate the quality of an investment or its potential to raise future tax revenues. He is a skilled politician who speaks the lingo of an economist to convince

voters and officials to send money his way. In short, most economic development is a thinly disguised way to legitimize self-dealing for certain industries.<sup>8</sup>



**Figure 1.** Real GSP growth versus economic development spending

Figure 1 is a simple scatterplot of per capital real GDP growth over the period 2010 to 2014 (using the Bureau of Economic Analysis Regional Economic Database at <http://bea.gov/regional/index.htm>) for each state as a function of per capita economic development spending over the same period. Also included are OLS results for an extremely simple model:

$$\text{Real GSP Growth per capita} = \alpha + \beta \cdot \text{Economic Development Spending per capita}$$

$$a = 0.77394 \text{ (} 0.215701 \text{)}$$

$$b = 0.000117 \text{ (} 0.000625 \text{)}$$

where  $\alpha$  and  $\beta$  are the true population parameters and a and b the corresponding sample estimates (standard errors in parentheses)

$$R^2 = 0.000726, \text{ overall F ratio} = 0.034866$$

Obviously, the slope of the regression line is insignificantly different from zero at the 5 percent level, which is not surprising. Ideally, the independent variable, economic development spending per capita would have been stated in real terms, as was GSP growth per capita, but this was not possible given the dataset.

Admittedly, this is a simple representation with very little econometric sophistication and no controls for other independent variables. It merely indicates that, if economic development efforts are successful, then their evidence is not apparent. Still, this is more evidence than economic developers have been able to provide of long-term economic growth. This very preliminary result with incomplete data is consistent with most legitimate studies of the efficacy of economic development programs.

### III. THE ECONOMIC THEORY AT WORK

So much for the limited empirical basis for claims that local economic development spending, whether through tax breaks, subsidies, or other means will improve a local economy. What economic theories could be worked to alternatively justify, condemn, or modify the approaches now being undertaken?

It is instructive to consider two possible economic theoretical reasons for government to provide economic development activity. The first is the possibility that economic development is a public good and therefore would not be provided without government intervention. The second is that economic development can be a profitable activity for government to sponsor, in that it results in higher tax revenues than would otherwise be realized. These are not exhaustive reasons, but are common in the literature referenced above and divide into the convenient compartmentalization of deontological versus teleological (in particular, utilitarian) or rights versus efficiency.

The first possibility requires asking the question, “To what extent is economic development a public good?” The two well-known necessary conditions for a public, or social, good are that it be non-rival and non-excludable. If non-rival, then sufficient capacity exists that any number can consume the good without using it up. If non-excludable, then no one can practically be prevented from consuming the good. If these two conditions both apply to economic development, then private markets would be hard-pressed to supply private needs for such development. To fill a “hole in the marketplace,” government would need to step in.

To what extent do these two conditions apply to economic development? Certainly, tax abatements are rival. Governments cannot afford to subsidize every business unless an unusually large factor endowment of a scarce resource allows them the luxury of doing so. In such a case, government financing of economic development is hardly necessary. In some cases, however, when a superhighway or airport, for example, has been built nearby, cities may experience excess capacity and consider the marginal cost of new users (businesses) to be zero. Sewer lines are another good which can provide excess capacity. *If the facility were already in place, or would have to be built anyway because of other obligations*, the local government might legitimately consider the marginal cost of new businesses in the area to be zero. But to levy a tax to build a facility or improve infrastructure for the express purpose of attracting new industry does not involve zero, or even low, marginal cost.

Cities and local development planners exclude businesses from assistance, too. Particularly, existing businesses that have already demonstrated their value as economic growth engines may feel left out of the tax abatement or subsidy gravy train.

Most cities are located because of geographical factors, although notable exceptions exist. Ports, mountains, springs, etc., are often why people chose to settle in a given location in the first place. To maintain that the whole economic future of an entire town or region depends on the implementation of a tax, the proceeds of which are to be used to attract vital industry, is to invite the scrutiny of an increasingly skeptical tax base.

The second argument requires us to try to answer the following question: “To what extent do governments realize a potential positive return to economic development activity?” In the absence of a public goods justification for government provision of economic development, we may consider a rate of return argument. Is the formation of economic development agencies and incentives justified by a large rate of return to tax dollars?

This argument begs the issue of whether or not economic development is a legitimate, constitutionally authorized function of government. Local economic development activity is not often evaluated from an efficiency of existence perspective or Paretian optimality. Rather, the entire argument here rests on whether or not the government can get a large “bang-for-the-buck” by getting in the economic development business. In other words, given that the government *will be* in economic development, what are the winners and losers for government to *invest* in? The argument may be restated as follows: “Can a local government subsidize its traditional functions by supplementing its tax base through economic development?” It is common for governmental entities using this argument to engage in all sorts of activities, such as airplane hangar construction and operation, golf course construction and operation, and other goods or services also provided by private companies.

Even if one dismisses the public goods argument against what we have characterized as economic development activity, the effectiveness of government involvement must be measurable *in advance* for advocates of such activity to make any sort of economic case for government financing of economic development activity. Can reliable *a priori* estimates of the costs and benefits of economic development be made in order to justify spending public funds or using governmental authority to pick winners and losers?

To attempt to answer this question, a common technique has been used by economic consultants to justify economic development programs: multiplier analysis. The reader should note that what is euphemistically called “multiplier analysis” in this paper applies to virtually all techniques used by economic development consultants to justify public spending, taxes, or subsidization of economic development activity.

#### **IV. MULTIPLIER ANALYSIS**

In general, economic impacts can be divided into two rough categories: direct and indirect. Direct effects are those from project expenditure, while indirect effects are events such as secondary job creation in areas like food service, housing, and other consumer spending. To capture the indirect economic impact on an area, many analysts have used multiplier analysis.<sup>9</sup> Multiplier analysis attempts to characterize how many times a dollar of direct expenditure is circulated throughout the economy in secondary spending. Multipliers may be stated in terms of jobs added, dollars spent, or other measures. Multipliers vary slightly from region to region and from activity to activity, but prove fairly stable from 1.2 times to 3 times. Table 2 shows multipliers calculated from different studies within the past thirty years.

*It should be noted that the multipliers from earlier studies tend to be higher than those from later studies.* This pattern is no accident and tends to hold for other studies as well. In addition, multipliers for state economies tend to be greater than those for smaller regions, such as counties, and for centers of commerce at the edges of states, the latter effect presumably from leakages of funds out of the area (Coughlin et al., 1991).

Multiplier models have their basis in input-output analysis. This technique was popularized by a Nobel laureate (Leontief, 1941). A highly simplified version of the technique follows. The economist gathers the values of the output for each industry in an economy and uses them to construct a giant matrix. Some industries are classified as final and others as intermediate. Final industries are those which use the output of intermediate industries as inputs. For example, the output of the original equipment tire industry would be considered as an input in the automobile industry. The output of each final industry is then expressed as a function of the output of the other industries, typically linear equations. These equations are then solved for the coefficients that relate

the output of final industries with the outputs of all other industries. Some economists then use the coefficients as multipliers, or the effect of an increase in spending on one type of product on the production of another.

**Table 4.** Comparison of spending multipliers from regional economics literature

<u>Study</u>	<u>Subject</u>	<u>Multiplier</u>
Stallman et. al. (1998)	Wisconsin Retirees in Rural Counties	1.2 times for younger families 1.4 times for older families
Liu et. al. (1999)	Veterinary College in Virginia	About 3 times
Kluender et. al. (1991)	Arkansas Forestry Sector	1.2 times to 1.56 times
Braun (1992)	Conventions in Florida	About 3 times
Vaughan et. al. (1994)	Hospital in Iowa, Illinois	Lower bound – 2.22 times Upper bound – 2.72 times
Regan (1995)	Denver Broncos Football Team	1.82 times

Although input-output analyses vary from this description of the technique, they share the common methodology of expressing one industry's output (or employment) in terms of another industry's output (or employment). Of the many input-output models in use, some of the more popular have been the fee-based U.S. Travel Data Center's Travel Economic Impact Model (TEIM), the U.S. Department of Commerce Regional Input-Output Modeling System (RIMS), The Regional Economic Models, Inc. (REMI) model from Massachusetts, and IMPLAN, a private consulting group's model from Minnesota.<sup>10</sup> Of these models, the least expensive, and least customized, is the RIMS II model. Many state agencies use the REMI model. The more expensive of these models use customized, proprietary data which are not generally available to the public.

Some of the objections to multiplier analysis are not easy to dismiss. One objection is that the level of detail required for multiplier analysis is frequently on the sub-county basis, when even county level data are frequently unavailable or unreliable. Another objection is that input-output modeling requires significant simplifying assumptions. Some of these are necessary because of the lack of availability of appropriate data. This is a problem common to all economic models and datasets. Others are needed because of the complexity of the mathematical relationships used to solve the model. Still others, perhaps the most difficult to address, have to do with methodology, or the philosophy of economic inquiry. An example is the assumption that one set of variables *causes* another set of variables. For example, it is assumed that some business sectors follow others. In an oil-producing state such as Arkansas, for example, the minerals industry might be said to lead housing and construction, since, in the past, oil and brine have been important primary employers in the state. But the situation for minerals changed. Low (until late 1999) oil prices meant that oil production contributed to a net drain in jobs. Large brine deposits in the Middle East changed the nature of the brine industry in Arkansas as well. In short, external economic conditions can and will change the relationships assumed within the local input-output model.

Although IMPLAN and other sophisticated products have attempted to remedy the situation, input-output derived multiplier analysis is necessarily generalized, because the few data that exist are standardized.

This is because the costs of collecting and maintaining those data which are subject to common scrutiny are borne by budget-conscious governmental entities.

Another common, though not universal assumption is that there are few leakages of funds outside the region being modeled, and that those leakages which do occur can be readily measured. Unfortunately, this is rarely the case. Particularly for urban areas, such leakages are very common and can either add jobs or take away jobs from the local economy. The complexity of accurately allowing for such interactions is beyond the statistical analysis of most available economic data.

Other complications include changing technology, and time lags between industries. This stems from the fact that controlled experiments cannot be carried out *en masse*. Analyses that are *post-hoc* using data that have not been gathered in a controlled setting do not readily lend themselves to reinterpretation for different industries, times, or regions. Even for those mega-meta-models in which standard errors are computed for multipliers, such standard errors are typically not adjusted for exhaustive specification searches. The Bayesian corrections for specification searches would result in standard errors that are higher and multipliers that are lower.<sup>11</sup>

Because of these and other problems, multiplier analysis has become less popular during the past ten years. All multipliers, for sound scientific reasons mentioned above, must be adjusted to more accurately reflect economic conditions. Truly meaningful, legitimate, and valuable economic impact studies often take highly-trained academicians many years to complete and must be interpreted with care. That is why Coughlin and Mandelbaum (1997) wrote long ago that meaningful analysis using multipliers is not clear-cut and mechanistic but requires the exercise of careful judgment by an experienced and knowledgeable analyst. Such analysis allows for a degree of subjectivity and, therefore, possible bias to enter the analysis. The consumer should be aware that estimates based on regional multipliers may be subject to considerable error.

Sanders (1994) cited cases in which hundreds of millions of dollars in public spending appeared “to have had no impact on individual communities.” This pessimistic assessment of sanguine multiplier analysis has been echoed by Tooman (2000) and Colclough et al. (1970). A *Wall Street Journal* article published in 2000 (Steigerwald, 2001) noted that throughout the nation, small suburbs are building convention centers for which they cannot possibly reasonably hope to recover costs. The fast-growing city of Plano, Texas, for example, has built a convention center that “has been a money loser the whole time, but Plano is hoping to expand anyway.”

Why would government officials continue to build convention centers, and other infrastructure, such as golf courses, *that they know in advance* will suffer excess capacity and therefore represent a net drain on taxpayers’ resources? The painful answer is to be found in the Public Choice literature of Buchanan, Tullock, Olson, and others. Local politicians and economic development directors, while ostensibly acting in the public interest, invariably act in their own interest, expanding their staffs and contacts in an effort to land a better job in the next county or borough.<sup>12</sup>

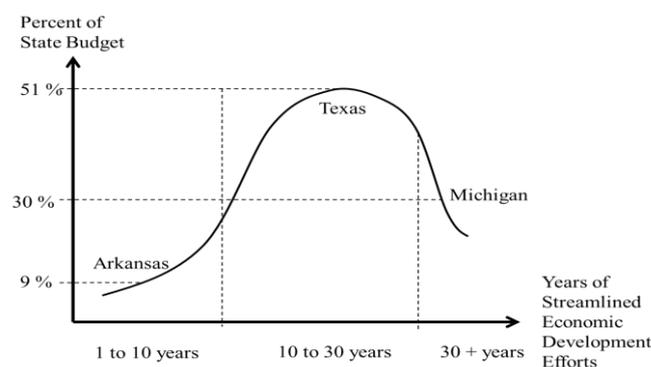
## V. SOME SIGNS OF CHANGE (DEVELOPMENTS)

Even were no potential conflicts of interest likely to occur in how the U.S. practices local and regional economic development, the causality embedded in the very concept may be backward. Perhaps economic development does not occur because a quasi-governmental agency collects taxes and redistributes dollars. Instead, perhaps economic development occurs in spite of collective efforts to improve a city or state’s

economy. Michigan is a case in point. During the heyday of the automobile industry, Michigan could do no wrong. Everything turned to gold. Since the decline in the industry, bailouts culminating in the U.S. government's takeover of General Motors have been the American auto industry's lifeline. This should not have been surprising, given that economic development has taken on the meaning of governmental appropriation and tax revenues rather than private market activity.<sup>13</sup> Texas has been lucky: its oil and natural gas reserves spawned many offshoots into other areas. But it is easy to mistake market success for governmental efforts. Now caught in the grip of an oil recession, Texas is facing the strain of corporate welfare and has begun requiring "clawback" provisions in many of its economic development grants. Anxious to avoid another Ypsilante, Texas legislators have mandated that due diligence be performed on promises of jobs and prosperity. Apart from getting the proverbial "blood out of a stone" vis-à-vis a failed venture, the problem is that the policies were politically based in the first place. With no economic basis for failure or success, it is virtually impossible to prove them up with post-audits. The data typically do not exist and much sophistication should be exercised in interpreting the few data that do exist.

Instead, the economic development industry seems to be following a life cycle phenomenon. Michigan is plainly at a different point in terms of economic development than is Texas. Texas is plainly at a different point in terms of economic development than is Arkansas. Borrowing the old product life cycle approach to characterizing the stages of market development, Figure 2 portrays the situation with those three states as representative examples. Here, the "streamlined" economic development efforts, such as those mentioned earlier that Arkansas will likely adopt this fall, allow for easier adoption of tax abatements and other incentives of which the taxpayers wish to remain rationally ignorant.

It would appear that Texas is now at the peak of its grand experiment with governmentally-planned economic development. The clawback provisions now imposed by the Texas legislature may indicate that the honeymoon is over for that particular state and results will have to be forthcoming or a divorce may be in the offing. Michigan is plainly uninterested in continuing to be part of the American economic development industry. Arkansas hasn't started asking questions yet. It is in the beginning of the economic development lifecycle.



**Figure 2.** Life cycle depiction "the war among the states"

## VI. JACOBS AND ECONOMIES OF SCOPE

Part of the next stage in U.S. economic development was addressed and promulgated more than fifty years ago. Jane Jacobs, a sociologist whose *The Economy of Cities* rocked the economic development world,

pointed out that the picking of winners and losers by government bureaucrats had little, if any, chance of success. Ms. Jacobs correctly pointed out that officials do not tend to be entrepreneurially-minded. Rather, they choose a one-size-fits-all system of taxes, subsidies, and other Rube Goldberg schemes to attract industries that, if they come, break the public purse in doing so.

Her solution was to *leave it alone*. Like Adam Smith, Ms. Jacobs was a social economist rather than an economic developer. She recognized that enclaves of people will naturally innovate and invent along those lines that are optimal for that society through economies of scope.<sup>14</sup> No need, she wrote, to force fit communities into business parks or city-funded water and sewer infrastructure for attracting a big employer. Instead, import-replacement will take place in communities so that winners and losers are winnowed out by local marketplaces rather than by bureaucrats. The result is a vibrant, dynamic, local economy rather than the continual rise and fall of businesses that increasingly depend on grants and subsidies to prop up their bottom lines.

Jacobs did her pioneering work with large cities. But large cities have no monopolies on economies of scope. Horton and Cox (2015) indicate that a community can be smaller and still benefit from Jacobsian economies of scope. Indeed, both economies of scale is not a necessary condition for economies of scope. An example is Vertical Harvest of Jackson, Wyoming. In that case, a small, highly isolated community was able to successfully implement import replacement using a private/public partnership with a combination of state and local economic development funds and private equity.<sup>15</sup>

## **VII. SUMMARY AND CONCLUSION**

If the economic development industry had not evolved to fill holes and gaps in the marketplace (to span the market) then it could not have survived for long. To the extent that the industry was formed to feather the beds of career bureaucrats, the changes mandated by market forces have not been pleasant, i.e., the experience of Michigan. Shrinking revenue resources and burgeoning expenditure obligations are likely legacies for government officials left to clean up after economic development consultants.

Ultimately, however, the quasi-governmental economic development agencies may prove to have been a good thing. Where every tax increase, subsidy and expenditure is carefully questioned, officials have increased incentive to act in the public interest. Where more traditional forms of government activity, such as public goods provision, are encouraged, the resulting infrastructure is likely to be what would have been provided in the long-term anyway. To stem a long-term, secular decline in population in a place without neighboring urban areas, for example, by attracting different and additional industries economic development officials may indeed be providing a needed economic component that would not be forthcoming without public sponsorship. But this is hardly the situation facing suburbs, in which the economic development industry has been most active.

Because of the competitive nature of states and municipalities, both businesses and taxpayers have been able to vote with their feet, as theorized by Charles Tiebout (1956) in his path-breaking approach to local goods provision. The resulting, dynamic, shifts in how various states and municipalities are participating in the existing approach to local economic development has resulted in alternative approaches, such as the import replacement idea of Jacobs as embodied in projects such as Vertical Harvest. The final, steady-state, of economic development is unlikely to rest solely on multiplier analyses using standardized data in a one-size-fits-all approach.

Because of the movement against the “spend it and they will come” approach, economists should be extremely cautious about lending their expertise and credentials to justifying economic development expenditures. As this paper has documented, the lack of theoretical foundations, analytic tools, and appropriate data make many economic development claims dubious. Merely building facilities with public money may not result in a better industrial base or provide other public benefits. Economists who value their reputations should probably steer clear of most economic development consulting.

## ENDNOTES

1. The publication was a newsletter published by the Texas Comptroller of Public Accounts. For at least ten years, it was available from the Comptroller’s office but is now available only by physical search of the archives.
2. At the web address, <http://www.mackinac.org>, the economists at the center provide numerous examples of how the programs “have no real or measurable practical impact.” In short, most of the jobs that are promised to materialize are never subjected to a post-audit to determine whether or not they actually did materialize. In Arkansas, The University of Central Arkansas hosts the Arkansas Center for Research in Economics at the web address <http://uca.edu/acre/>. ACRE is non-partisan, but similar to the Mackinac Center, analyzes economic development efforts from the Public Choice School of economics viewpoint.
3. Phillips and Goss (1995) cite the pioneering econometric studies of Bartik (1985, 1992) in their evaluation that the data for proving many of the claims of economic developers simply do not exist at the state or local levels.
4. *The New York Times* ranked Texas first in the nation with over \$19 billion in local economic development incentives (see <http://www.nytimes.com/interactive/2012/12/01/us/government-incentives.html>).
5. The Texas Incentive Grid is Table 1 of the Update to Comprehensive Summary Tables – 2014 as downloaded on June 17, 2016, from the web location: <http://www.texasahead.org/reports/incentives/pdf/96-1453-2-Updated-Texas-Economic-Development-Incentive-Grid-2014.pdf>
6. If the passionate language from Arkansas officials sounds familiar, then reread from the introduction to this paper the now-mothballed blurb that once headlined the Texas State Comptroller’s website.
7. The Mackinac Center weblog is not alone in pointing out economist Andrew Zimbalist’s criticism of billionaires using public money to build billion-dollar sports complexes (<http://www.mackinac.org/22443>). An interview with Zimbalist on the *Freakonomics* website (<http://freakonomics.com/2009/01/09/questions-for-sports-economist-andrew-zimbalist/>) echoes Zimbalist’s consistent prescription for taxpayers: “One should not anticipate that a team or a facility by itself will either increase employment or raise per capita income in a metropolitan area.”
8. *The New York Times* database indicates that the leading industries receiving local economic development subsidies are manufacturing and agriculture. The film industry has been surprisingly strong in lobbying for subsidies in many states.
9. A good overall introduction to multiplier analysis can be found in Blakely (1994), Chapter 5.
10. While the TEIM model is apparently no longer available, the other three models mentioned are readily accessible via the Internet, for prices ranging from several hundred to several thousand dollars. The IMPLAN model is at <http://www.mig-inc.com>. The RIMS model is at <http://www.remi.com>. The REMI model is at <http://www.bea.doc.gov/bea/regional/rims/>. Frechtling and Horvath (1999) apply the RIMS II model to estimate the economic impact of tourist spending. Further details on using (and misusing) the RIMS II model are contained in Coughlin et al. (1991). A study in which IMPLAN is used to measure the multiplier effects in one county’s economy because of water diversion is Shockley and Ebeling (1997). Flaws in the IMPLAN model are discussed in Charney and Leones (1997).
11. Leamer (1978) is the standard reference for this problem.
12. This is not to say that projects championed by developers are of no value, but only that the economic descriptor is frequently misplaced. Perhaps the terms should always, instead of only occasionally, be *industrial* development rather than *economic* development.
13. Again, the IEDC website is all about governmental agencies and appropriations, not markets. As GM found out, this model of economic development is not sustainable. It depends on the continued complacency of taxpayers.
14. Jacobs (1970) and Steigerwald (2001) are good places to start with Jacobs’ model of economies of scope. Horton and Cox (2016) further apply the idea to liberal arts colleges.
15. See Cox and Horton (2017). Vertical Harvest’s story has appeared many times in print and on the web, including Henderson (2015) and March (2016).

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