State and local governments use targeted tax incentives in an attempt to create jobs and stimulate economic growth. According to Poole et al. (1999, 1), “governors, mayors, legislators, and council members justify these public investments on the grounds that private-sector decisions to invest in a community result in jobs, income, and tax revenues that are essential to the economic and social well-being of a community or state.” Targeted tax incentives take many forms, including job development and retraining tax credits; tax abatements; infrastructure financing; or in some cases, outright grants and loans of public funds. State and local officials use these fiscal tools to attract a private firm to a new location, help support or expand an existing business, or prevent a company from relocating to another city or state. While these policies are common among state and local governments, many scholars and policymakers have repeatedly questioned the efficacy of these policies.
Besides not achieving the stated goals, these incentive programs may encourage behavior that can lead to a host of perverse and unintended consequences.

If the efficacy associated with these types of policies is in serious doubt, why are they so popular with state governments? The answer is that businesses engage in rent-seeking behavior, employing resources to lobby for tax breaks and other subsidies that add to owners’ profits. This lobbying often creates a bidding war between two or more state and or local governments that can increase the value of the incentives and rents the firm can extract from these government agencies. Economist William Baumol (1990) notes that entrepreneurial individuals have a choice to devote their labor efforts toward either creating private-sector wealth or securing wealth redistribution through political and legal processes (e.g., lobbying and lawsuits).

Numerous studies point out that there are clear political benefits for using targeted financial incentives (Bennet and DiLorenzo 1983; Esinger 1989; Buss 1999a, 2001; Ellis and Rogers 2000; Saiz 2001; Calcagno and Hefner 2007). Hinkley et al. (2000) claim that economic development agencies are not providing enough information to either legislators or the public about the economic incentives being offered and call for an increase in audits of these agencies. While several authors do concede that targeting has a political component to it, they fail to recognize that targeting industries may well be an inefficient allocation of resources (Dewar 1998; Buss 1999a,b; Finkle 1999; Wiewel 1999; Calcagno and Hefner 2009; Coyne and Moberg 2014).

Industries seeking preferential treatment dominate the political process, because voter-taxpayers have very little incentive to be well informed about the costs associated with these tax incentive programs and to create any means of organized opposition. The jobs created at a new plant are plainly visible to the state or local community; the community will not see the jobs that are lost elsewhere in the economy due to the higher tax burdens imposed on other businesses and consumers. Nor do taxpayers see the scarce resources that this political process is allocating away from ventures that could instead produce real output and growth. In addition, taxpayers may be unable to see that their future tax bills will be higher in order to amortize and service the public debt issued to finance the subsidies diverted toward the owners of politically influential private companies (Hicks and Shughart 2007).

The purpose of this chapter is to review the consequences of tax incentives to provide the reader with a better understanding of the role targeted tax incentives may play in state and local economic development. Earlier research has typically focused on the efficacy of these incentives: are jobs actually
created? A different branch of research has focused on other outcomes, such as the possibility that such incentives may lead to rent-seeking by the firm and politicians and the possibility of political corruption. We begin by discussing the possible economic distortions and unintended consequences that these policies create. Then we examine the efficacy of targeted tax incentives by presenting a summary of research findings. We then provide some specific cases of state and industry experiences that demonstrate how these perverse incentives lead to ineffective policies and unintended consequences. We conclude with a summary and policy recommendations.

UNINTENDED CONSEQUENCES OF TAX INCENTIVES

Incentives Cannot Turn a Moose into a Camel

Site location consultants are fully aware that they must first meet certain fundamental criteria for their industry for a successful location decision. This often places tax incentives at the bottom of the list of criteria. For example, a report by CBRE (2013), a commercial real estate services company, discussed the site location criteria for data centers. What are driving these choices are four primary considerations: power, telecommunications, geography, and climate:

- Power: Cost per kilowatt hour, carbon footprint, fuel mix, and infrastructure;
- Telecommunications: Fiber providers, latency;
- Geography: Proximity to headquarters or airport locations, population size, labor force, and water; and
- Climate: Environmental risk (e.g., hurricanes, tornadoes, earthquakes), free cooling.

After identifying locations based on these primary drivers, communities will remain on the short list based on real estate availability and cost. This holds true for existing co-location facilities or greenfield sites for new construction. Taxes and incentives are the last criteria. The report observes that taxes and incentives are the tools that governments have control over in order to attract a data center. As of 2013, seventeen states have customized incentive programs for this industry. In 2012 and 2013, eight states either created or modified existing programs to lure these centers. To be “competitive,” many states
are simply mirroring the others’ incentive programs. For example, Georgia, Virginia, South Carolina, Alabama, Nebraska, Arizona, Texas, and Ohio all offer 100 percent exemption from the sales tax. At some point, as these states equalize their tax rates, any advantage gained by the exemptions will evaporate, so that the ability of any state to attract additional employers is largely unchanged from before any states offered such tax exemptions. Not only would development be largely unchanged, but also tax burdens would arguably be more evenly distributed across taxpayers without these exemptions. Thus, firms identify location sites considering industry-specific resource needs and availability. Tax incentives cannot create these criteria for these industries. Incentives will not overcome the lack of necessary resource considerations, such as environmental risk or access to a port.

Strategic Rent-Seeking
Rent-seeking firms would certainly take advantage of the possibility of playing states against one another where discretionary incentives are available. Patrick (2016) analyzed BMW’s decision to locate in South Carolina. In 1992, BMW announced that it would locate a plant in Greenville County, SC, after a site selection process that ended in a bidding war between Greenville and Omaha, NE. Earlier we noted that the fundamental characteristics of a region are the primary drivers of the site selection process and that incentives, if they matter at all, only matter at the margin. The chairman of BMW stated the critical factors in the site selection were proximity to an international airport, port (our emphasis added), rail, union presence, and the number of time zones between Bonn, Germany, and the site. How Nebraska became a potential site is astounding, given the absence of a port, among other issues. Fundamentally, the absence of a port is a characteristic that would be difficult to overcome with tax incentives. The initial incentive package from South Carolina was valued at $35 million (Kurylko 1992a). However, Nebraska offered a package valued at $240 million. South Carolina countered with a package that was estimated to be $150 million (Kurylko1992b). Patrick concludes that, “Nebraska’s lucrative incentive package served a useful purpose for the company—raising South Carolina’s bid from $35 million to $150 million” (Patrick 2016, 9). As with any other rent-seeking activity, this process does more than simply transfer wealth from consumers to producers. The process of acquiring the rents results in the whole transaction being a welfare loss to society.
Continued Rent-Seeking: Receiving Incentives after Location Selection

If the purpose of tax incentives is to induce a company to locate in a region, then what justification could there be for providing more incentives after the location decision has been made? Consider the example from the municipality of North Charleston, SC, whose city council voted to reduce business license fees for four companies that were already in the region: Boeing, Daimler Vans Manufacturing, Select Health of SC, and Trident Regional Medical Center (Slade 2013). These additional incentives demonstrate Buchanan’s (1986) point that once state government policymakers open the door to incentives, these businesses are motivated to try to influence the policy to continue to work in their favor. According to Coyne and Moberg (2014), this continued rent-seeking opportunity can create a system of cronyism, giving these firms access to public resources to extract these rents.

Good Jobs First tracks incentives offered to industries across the United States (Morgan et al. 2013). One subset of their list is “megadeals.” They define a megadeal when the subsidy award totals more than $75 million from state and local governments. Table 1 lists repeat megadeals made in the same state. If the goal of incentives is to recruit industry, then clearly there is no need to offer larger packages to firms already in place. One could argue that this piling on of incentives is a form of job blackmail, whereby the firm threatens to leave unless additional incentives are offered. These repeated deals make it clear that this behavior is simply rent-seeking by these firms. Recently, Kennametal, a firm that had been located in Latrobe, PA, for more than 70 years was awarded $1 million in incentives by the state of Pennsylvania to move its headquarters to Pittsburgh. The reason for offering these incentives to move the firm’s headquarters from one county to another was to keep the company in the state (Gannon and Belko 2015; Sheehan 2015). In 1996, South Carolina passed legislation allowing “all qualified tire manufacturers” in the state to take a jobs tax credit for all jobs transferred from one plant to another as if they were newly created jobs.1

Incentives Crowd Out Public Expenditures

The counterfactual of how one would allocate these resources if government officials were not using them to target firms is a difficult (if not impossible) task. However, it is still important to think about alternative uses of these funds not only remaining in the private sector, but also how else these funds may have been allocated in the public sector. Wang (2016) examines whether
Table 1. Repeat Megadeals by State

<table>
<thead>
<tr>
<th>State</th>
<th>Year</th>
<th>Company</th>
<th>Subsidy ($ millions)</th>
<th>State</th>
<th>Year</th>
<th>Company</th>
<th>Subsidy ($ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>1990</td>
<td>Teck Resources</td>
<td>180.0</td>
<td>New Mexico</td>
<td>1993</td>
<td>Intel</td>
<td>645.0</td>
</tr>
<tr>
<td></td>
<td>1999</td>
<td>Teck Resources</td>
<td>870.0</td>
<td></td>
<td>2004</td>
<td>Intel</td>
<td>2,000.0</td>
</tr>
<tr>
<td>Alabama</td>
<td>1993</td>
<td>Mercedes</td>
<td>238.0</td>
<td>New York</td>
<td>2002</td>
<td>Sematech</td>
<td>210.0</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>Mercedes</td>
<td>119.3</td>
<td></td>
<td>2008</td>
<td>Sematech</td>
<td>300.0</td>
</tr>
<tr>
<td></td>
<td>2009</td>
<td>Mercedes</td>
<td>100.0</td>
<td></td>
<td>2000</td>
<td>IBM</td>
<td>660.0</td>
</tr>
<tr>
<td></td>
<td>1999</td>
<td>Honda</td>
<td>158.0</td>
<td></td>
<td>2008</td>
<td>IBM</td>
<td>140.0</td>
</tr>
<tr>
<td></td>
<td>2002</td>
<td>Honda</td>
<td>89.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illinois</td>
<td>1989</td>
<td>Sears</td>
<td>242.0</td>
<td>Ohio</td>
<td>2009</td>
<td>General Electric</td>
<td>121.0</td>
</tr>
<tr>
<td></td>
<td>2011</td>
<td>Sears</td>
<td>275.0</td>
<td></td>
<td>2014</td>
<td>General Electric</td>
<td>98.0</td>
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<td>2006</td>
<td>General Motors</td>
<td>156.0</td>
<td>Oregon</td>
<td>1993</td>
<td>Intel</td>
<td>121.5</td>
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<td>1985</td>
<td>General Motors</td>
<td>136.0</td>
<td></td>
<td>1999</td>
<td>Intel</td>
<td>200.0</td>
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<td></td>
<td>2012</td>
<td>General Motors</td>
<td>120.0</td>
<td></td>
<td>2005</td>
<td>Intel</td>
<td>579.0</td>
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<td>Kentucky</td>
<td>1985</td>
<td>Toyota</td>
<td>147.0</td>
<td></td>
<td>2014</td>
<td>Intel</td>
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<td>2013</td>
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<td>South Carolina</td>
<td>2009</td>
<td>Boeing</td>
<td>900.0</td>
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<td>2013</td>
<td>Boeing</td>
<td>120.0</td>
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<td>2002</td>
<td>BMW</td>
<td>103.5</td>
<td></td>
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<td>2008</td>
<td>General Motors</td>
<td>268.5</td>
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<td></td>
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<tr>
<td>South Carolina</td>
<td>2009</td>
<td>Boeing</td>
<td>900.0</td>
<td>Tennessee</td>
<td>2008</td>
<td>Volkswagen</td>
<td>554.0</td>
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<tr>
<td></td>
<td>2009</td>
<td>General Motors</td>
<td>1,015.5</td>
<td></td>
<td>2014</td>
<td>Volkswagen</td>
<td>263.3</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>Ford Motors</td>
<td>222.0</td>
<td></td>
<td>2000</td>
<td>Nissan</td>
<td>200.0</td>
</tr>
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<td></td>
<td>2003</td>
<td>Ford Motors</td>
<td>90.3</td>
<td></td>
<td>2005</td>
<td>Nissan</td>
<td>230.0</td>
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<td></td>
<td>2009</td>
<td>Ford Motors</td>
<td>174.7</td>
<td></td>
<td>2009</td>
<td>Nissan</td>
<td>98.0</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>Ford Motors</td>
<td>909.0</td>
<td>Texas</td>
<td>2006</td>
<td>Samsung</td>
<td>233.4</td>
</tr>
<tr>
<td>Tennessee</td>
<td>2013</td>
<td>Boeing</td>
<td>8,700.0</td>
<td></td>
<td>2012</td>
<td>Samsung</td>
<td>83.6</td>
</tr>
<tr>
<td>Minnesota</td>
<td>1988</td>
<td>Triple Five</td>
<td>108.0</td>
<td></td>
<td>2003</td>
<td>Boeing</td>
<td>3,244.0</td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>Triple Five</td>
<td>250.0</td>
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<td>2013</td>
<td>Boeing</td>
<td>8,700.0</td>
</tr>
<tr>
<td>Washington</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

economic development incentives crowd out or reduce public expenditures. Her research finds that incentive expenditures reduce spending on what is often called productive public goods, such as education, health and human services, sanitation, and utilities. She finds a 2-year lag in per capita public goods expenditures of approximately $18.60 for every $100 spent per capita on incentives. These findings suggest that, even if the tax revenues funding these targeted incentives were to remain in the public sector, state governments could spend it on producing the core functions of government that even advocates of limited government recognize. Thus, state governments are misdirecting this tax revenue, and as a result, they produce less of the public goods they are responsible for and fewer of the services that firms require.

**Incentives Lead to Corruption**

Glaeser and Saks (2006) investigate the determinants of corruption at the state level. Corruption is of course nothing new in America’s history. However, we tend to associate it more with underdeveloped countries. These authors note that between 1990 and 2002, “federal prosecutors convicted more than 10,000 government officials of acts of official corruption, such as conflict of interest, fraud, campaign-finance violations, and obstruction of justice” (Glaeser and Saks 2006, 1053). Indeed, it is not rare that governors of several states have had to resign amidst allegations of corrupt practices. Glaeser and Saks found a weak negative relationship between corruption and economic development in a state. Utilizing the same data as Glaeser and Saks, Felix and Hines (2013) investigate the connection between tax incentives (in the form of tax abatements, tax credits, and tax incremental financing arrangements) and corruption. They find a positive and statistically significant correlation between offering incentives and corruption. Felix and Hines also find that communities in states with less of a culture of corruption tend to avoid offering businesses incentive packages. They hypothesize that communities with less corruption tend to prefer to structure their general tax levels, spending programs, and other business recruitment policies instead of designing specific deals for specific firms.

We do not maintain that tax incentives are structured to promote corruption. However, the manner in which these deals are structured opens the door to corruption. In the case of tax incentives for the film industry, a state audit in Iowa found $26 million in improperly issued tax credits. The state’s former film office director was convicted of falsifying public records. State prosecutors charged five independent filmmakers and a tax credit broker. The tax incentive
program was suspended in 2009 (Verrier 2015). Even though these incentives resulted in political corruption, the state of Iowa reestablished the film office in 2013 but did not provide funding at that time.

The High Cost of Optics
“Commentators generally agree that incentives violate the most basic principles of sound tax policy. Incentives result in tax systems that are less accountable, less efficient, and less fair. Moreover, there is more than ample evidence that incentives do not work” (Zelinsky 2008, 1151). In addition, as Richard Pomp (1998) notes, “tax incentives probably reward corporations for doing what they would have done anyway.” So why are targeted incentives so prevalent an economic development tool for state and local governments, and why does their use continue to grow? Pomp observes that legislators “fear that being perceived as anti-business or anti-jobs is worse than being seen as promoting highly visible, albeit ineffective, incentives” (Zelinsky 2008, 1151).

Morgan (2009) maintains that, from the view of policymakers, thinking that they are winning some of the time in the incentive game is better than always losing. Bartik (2005) claims that public officials might be willing to tolerate the inefficiency of incentives if they provide an edge, no matter how slight (emphasis added). Taking a public choice approach, Calcagno and Hefner (2007) find evidence of a Leviathan theory of government. They argue that government officials offer these types of targeted incentives to maximize corporate tax revenue. Whether higher corporate tax revenue results in economic growth is uncertain, but Calcagno and Hefner offer one possible explanation of why state governments continue to offer a tax incentive that otherwise offers no obvious economic benefit to the state. Even if corporate tax revenues increase, the net effects to the tax burden and overall tax revenue are less clear. Regardless of the net effects, this result suggests that politicians have a motivation different from the stated objective. If politicians are willing to trade off the misallocation and inefficiencies of resources to maximize revenue and have constituents perceive them as business friendly, these actions can be to their political benefit.

BACKGROUND: THE EFFICACY OF TAX INCENTIVES
Economists and policymakers have argued that competition among states to entice companies through targeted incentives provides no net gain to the US economy: “From the states’ point of view each may appear better off competing for particular businesses, but the overall economy ends up with less
of both private and public goods than if such competition was prohibited” (Burstein and Rolnick 1995, 7). So what effects do these policies have on a state’s economic growth?

The subject of state governments targeting industries through tax policy raises important questions regarding economic growth and development, which requires us to examine whether the economic benefits of these tax policies are worth the economic costs. Whether state development incentives lead to real job creation and economic growth has been the subject of much debate among economic scholars. The economics literature abounds with research studies that have examined a variety of programs across the United States at both the state and local levels. These studies suggest that economists have long doubted the efficacy of using state tax policy to induce mobile firms (Esinger 1989). Economists have found the evidence associated with the issue of tax and other development incentives generating economic growth unconvincing (Buss 1999a,b, 2001).

For instance, several of the Federal Reserve District Banks have published articles investigating the role of tax incentives on state economic growth. The evidence in these studies suggests that state governments should eliminate, abolish, or refine tax incentives policy and thereby remove the competition for investment that is occurring among states.

Ultimately, all these targeted incentives claim to have one major goal: to create jobs in the state. Gabe and Kraybill (1998), in a study that examines which firms in Ohio receive targeted incentives, find that the number of new jobs promised by the targeted business is the major factor in deciding who receives the incentive. One could argue that this is a result of political versus market decision-making. Examining more than 2,000 programs across all states, Saiz (2001) finds no evidence of overall growth in state gross domestic product or employment levels associated with offering financial incentives and finds negative impacts in certain industries. A 2008 report analyzing the impact of state government incentives to attract businesses across Kentucky counties examines the actual incentives claimed by these businesses and found weak positive effects associated with tax incentives, but only in border counties. The report found no evidence of spillover effects in adjacent counties. The authors argue that since Kentucky’s incentive packages are similar to those of most states, they could generalize their findings to other states (Hoyt et al. 2008). Hicks and Shughart (2007) provide a summary of the literature, which has consistently found that targeted tax incentives have little effect anywhere in the United States. Using a meta-analysis of the most commonly cited reviews of this literature, Peters and Fisher (2004, 35) arrive at the same conclusion:
“the most fundamental problem is that many public officials appear to believe that they can influence the course of their state or local economies through incentives and subsidies to a degree far beyond anything supported by even the most optimistic evidence.” Coyne and Moberg (2014) illustrate a variety of cases to demonstrate that targeted tax incentives are less than desirable policy. They present several justifications that state governments offer for providing these incentives but note that if firms would have located to an area without the economic incentives, then state governments cannot really claim that they have created these jobs. Instead they argue, as we noted above, that these types of targeted incentives create a culture of cronyism and rent-seeking.

Not only does recent academic research question the efficacy of tax incentives, but also, as far back as the 1940s, research in South Carolina pointed to the same conclusion. During the Second World War, the Preparedness for Peace Commission noted that tax rates were not the sole reason that industries chose to locate in a state (Stone 2003). An earlier report by the State Planning Board questioned the effectiveness of granting special tax exemptions to new industries. Although many Southern states were employing exemptions to be competitive, a survey of these states found that nearly all of them found the practice undesirable. Furthermore, as states competed with one another, tax rates equalized, thus destroying any advantage gained by the exemptions. Even in the face of longstanding research that questions the value of targeted incentives, legislatures persist in making them available. This is especially the case in the film industry, where research has found the incentives to be wasteful (Hefner 2008; Luther 2010). Several states have responded by reducing or terminating these incentives, only to reenact them subsequently.

Buss (1999a, 2001) claims that the research shows that state development agencies’ conduct has little economic value and that state governments should not meddle with private location decisions. According to Poole et al. (1999), the actual impact of development strategies is often unknown, because these economic developers lack the necessary skills to identify the appropriate method and have limited data for analysis.5

The tool most often used by economic development agencies is the economic impact study. These studies often contain serious flaws. As a result, they may overstate the employment and economic gains associated with a new or expanded plant. One should note several issues here. First, no single methodology is universally accepted for counting jobs and income. While the targeted firm may create new jobs, the local labor force will likely be reshuffled in an effort to fill the new jobs. In 2001, Nissan opened a facility in Canton,
MS, where 90 percent of the workers employed lived and previously worked in the five counties surrounding the plant (Peavy 2007). Thus, only 10 percent of the jobs at the new Nissan plant were either taken by individuals who were unemployed prior to opening the plant or moved to Madison County, MS, from more distant locations, including out of state (Hicks and Shughart 2007). The economic impact studies do not indicate whether the jobs that workers leave are filled, remain vacant, or are eliminated when they move to the new job openings. Thus, economic impact studies cannot determine whether the overall change in employment is merely a redistribution of existing employees from one firm to another. Second, the benefit of these jobs to the state can be mitigated, depending on whether labor migrates from out of state to fill these positions. Third, the benefits of new jobs are subject to overstatement and double counting when the studies evaluate the indirect or ripple effects. The indirect effects attempt to measure the economic benefits that the new jobs create throughout the economy. Coyne and Moberg (2014) argue that even sophisticated statistical methods have difficulty determining whether the investment by a firm in a location, or the hiring of new workers was the direct result of specific benefits provided. And while the benefits and costs of these policies are difficult to determine, the necessary counterfactual case of how the resources would have been allocated is also unknowable. It is the fact that we cannot easily demonstrate these unseen effects of how else consumers and producers would allocate these resources that, in part, allows politicians to continue these policies.

Often firms that receive these targeted incentives are subject to little or no accountability and rarely create the number of jobs or the hourly wage rates they promise. According to the New York Times, in 2009, General Motors, after receiving a federal bailout, closed fifty properties where incentives were awarded, leaving the taxpayers to pay for the incentives promised (Story 2012). These firms will often move their operations elsewhere when the tax incentives or subsidies end. In particular, call centers and high-tech companies that employ few specialized physical assets will relocate, because they can easily abandon one site in favor of another in search of a more attractive incentive package (LeRoy 2005).

When these targeted incentives attract individuals from other states or cities to the local labor force, state and local governments may have to provide additional public goods to accommodate them. If the state government is granting the new company in the area relief from state and local taxes, and if the tax revenue generated from the new firm does not cover these additional costs, the increased government spending will fall on other existing
businesses. This shifting tax burden may destroy as many jobs as the incentives provided to the new firm might create.

**ECONOMIC COSTS: EXAMPLES FROM INDUSTRY**

Although tax incentives have long been endorsed as the highway to prosperity, with promises of attracting businesses, providing jobs, and enriching the state, most public finance experts consider them bad policy. These incentives can shrink the tax base, thus shifting the burden of taxes and reducing tax revenue available for the basic functions of state government. Furthermore, they open the door to rent-seeking and corruption. Finally, there is little evidence that targeted incentives result in economic growth in the form of good paying jobs.

Firms that receive incentives to locate in states do create jobs, but at what cost? When FedEx created a new hub in North Carolina, the state effectively paid $77,000 per job (LeRoy 2005). The automobile industry generates a lot of attention when companies relocate or build new plants in areas after receiving state incentive packages. Table 2 reports the average cost per job to attract automobile factories to the various states that offered incentives to attract automobile producers. Are employees at these plants earning a salary comparable to what the state is paying to attract these jobs, and is what they are adding to the state economic growth providing a return for the state’s “investment”? Finally, are these jobs reducing the unemployment rate in these areas?

**Efficacy Revisited**

In 1984, 10 years before the first major auto plant investment in Alabama by Mercedes, the unemployment rate in the state was consistently higher than the national average. Alabama then attracted Honda in 1998, Toyota in 2001, and Hyundai in 2002. In 10 of the 18 years after the Mercedes expansion, the state unemployment rate was higher than the national average. In only 8 of the post-Mercedes years did the state unemployment rate drop below the national average (we exclude the year of the announcement).

Michigan incentivized General Motors in 1998. In 6 out of the 10 years prior to that subsidy, the state’s unemployment rate was higher than the national rate. In 8 out of 10 years after the event, it was still higher. South Carolina entered the automotive industry incentive game in 1992 with BMW. In only 2 out of the 10 years prior to that event was the state’s unemployment rate higher than the national rate. After BMW’s arrival, that changed to 6 out of 10 years. Kentucky attracted Toyota in 1986. In six out of ten years before the
### Table 2. US Auto Plant Investments

<table>
<thead>
<tr>
<th>Company</th>
<th>State</th>
<th>Announcement Date</th>
<th>Initial Employment Estimate</th>
<th>Nominal Announced State and Local Incentives ($ millions)</th>
<th>Real Announced State and Local Incentives(^a) ($ millions)</th>
<th>Real Incentive Cost per Job(^a) ($)</th>
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<td>Hyundai</td>
<td>Alabama</td>
<td>2002</td>
<td>2,000</td>
<td>118</td>
<td>118(^b)</td>
<td>59,000(^b)</td>
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<td>2001</td>
<td>350</td>
<td>29</td>
<td>29</td>
<td>82,857</td>
</tr>
<tr>
<td>Nissan</td>
<td>Mississippi</td>
<td>2000</td>
<td>4,000</td>
<td>295</td>
<td>299</td>
<td>74,835</td>
</tr>
<tr>
<td>Honda</td>
<td>Alabama</td>
<td>1999</td>
<td>1,500</td>
<td>158</td>
<td>165</td>
<td>110,290</td>
</tr>
<tr>
<td>GM</td>
<td>Michigan</td>
<td>1998</td>
<td>700</td>
<td>107</td>
<td>114</td>
<td>162,287</td>
</tr>
<tr>
<td>Mercedes</td>
<td>Alabama</td>
<td>1994</td>
<td>1,500</td>
<td>253</td>
<td>289</td>
<td>192,730</td>
</tr>
<tr>
<td>BMW</td>
<td>South Carolina</td>
<td>1992</td>
<td>1,900</td>
<td>130</td>
<td>155</td>
<td>81,479</td>
</tr>
<tr>
<td>Toyota</td>
<td>Kentucky</td>
<td>1986</td>
<td>3,000</td>
<td>147</td>
<td>214</td>
<td>71,404</td>
</tr>
</tbody>
</table>

Source: Division of Research, University of South Carolina (2002).

Note: Inflation adjustments are made using GDP deflator series 2001 as the base year.

\(^a\)Includes only initial incentives in real terms, not additional or ongoing incentives.

\(^b\)2002 dollars, assumed equal to 2001 dollars.
plant and six out of ten years after Toyota’s arrival, the state’s unemployment rate was higher than the national rate.

We have investigated the statistical relationship between a state’s unemployment rate compared to the national rate before and after the advent of an automotive plant expansion. We find that the state unemployment rate is highly correlated with the national rate and not related to the expansion of an automotive plant.

When using the unemployment rate as a pre- versus post-measure, like many researchers, we find a weak to nonexistent relationship with incentives. In addition, we investigated the connection between the tax burden in these automotive-incentive states by comparing the effective tax rates before and after the event of landing an automotive facility. If attracting these plants and creating these jobs is an effective economic policy, it should be generating higher tax revenues, which could lower the effective tax burden. Using data from the Tax Foundation, we found a positive statistically significant relationship: the effective tax burden increased afterward, but not by much.  

Highlighting the Film Industry Once Again

The film industry is very aggressive in seeking incentives from state governments, and states seem eager to offer these incentives. The state film incentive offices provide relevant data which illustrate our point further. What is so unique about the film industry that warrants special types of incentives? And why not provide similar incentives to other industries?

What makes the film industry special? The industry has desirable features: it is creative, entertaining, and environmentally clean, to name a few. The answer perhaps was best summarized in a Federal Reserve Bank of Minneapolis publication: “Call it a movie trailer for economic development: A film production company comes to town with its director and stars, spends a lot of money on lodging and food, hires locals as crew and extras. Residents run into their favorite stars at the local coffee shop, and the location is seen by millions of viewers on the big screen—a great boost for tourism” (Cobb 2006, 14). In an effort to capture this economic development, almost every state in the country has a film office. More importantly, almost every state offers a very favorable incentive package to the film industry. Indeed, if each state is attempting to create a competitive advantage in the film industry using tax incentives, then there should be no surprise that each state “ups the ante” each time another state raises the stakes. Since so many states are competing with one another
for a limited number of films, these subsidies encourage a race to the bottom, as each state raises the ante in their generosity. As one New York producer noted about Connecticut’s increase in their subsidies: “The good news is that Connecticut could spur the New York credit higher” (Foderaro 2008).

Calcagno and Hefner (2009) discussed the inefficiencies of film incentives in South Carolina from a public finance perspective. One interesting aspect of the film industry is that in many states, it is the most transparent in terms of identifying the costs of the incentives. For example, film offices often report these incentives. In addition, various revenue departments also report the incentives. It is relatively easier to analyze and thus criticize this type of corporate welfare. In 2002, only five states offered film incentives. By 2009, forty-four states had jumped on the bandwagon.

In 2013, South Carolina passed the Film Rebates Bill. This bill resurrected a set of film subsidies, making them permanent. South Carolina once again offers a cash rebate of up to 30 percent for supplies purchased from South Carolina vendors. The film companies can also receive rebates for wages up to 25 percent for South Carolina residents and 20 percent for out-of-state residents. Previously the supply and wage rebates were 15 percent, which is a decrease from where they were in 2004. Also under the new law, the incentives are permanent and are not subject to the General Assembly’s annual budget process (Knich 2013).

Button (2015) estimates the impacts of state-level motion picture production incentives on filming location, establishments, and employment and found that most incentives have a moderate effect on filming location but almost no effects on employment or establishments.

Michigan is another case study of incentives gone amok (Skorup 2015). Michigan joined the film incentive scene in 2008, developing a program that reimbursed filmmakers for up to 42 percent of costs. Since then, Michigan has spent $450 million on film incentives, but the state has fewer film jobs in 2015 than it did in 2008. Thom (2015) reports that in 2013, film incentives created zero full-time jobs. In 2010, Michigan’s nonpartisan Senate Fiscal Agency found that the program returned $0.11 for every taxpayer dollar spent. Similar findings exist for other states: $0.23 on the dollar in Louisiana, and $0.14 on the dollar in Massachusetts. Connecticut came in at a $0.07 return, Pennsylvania at $0.24, Arizona at $0.28, and New Mexico at $0.14 (Hudson and Bryson 2015). The poor return on incentives in the film industry demonstrates that continuing to offer these targeted incentives only leads to further rent-seeking behavior and the corruption that comes from engaging in it, as noted above.
CONCLUSION

It is not the proper function of government to decide which businesses should receive favor, nor do they have the unique ability to identify which of these businesses will succeed. This is the role of the private sector and the profit-and-loss system. As noted above, Hayek’s (1945) idea of the division of knowledge explains why these types of targeted economic incentive cannot succeed.

The vast literature on the ineffectiveness of incentives bears out this point, as does the evidence presented in this chapter. So why do policymakers persist in asking for legislation to provide more incentives? The literature argues that there clearly is a political benefit to offering these incentives, even if no economic benefit accrues to the state. Calcagno and Hefner (2007) find that offering incentives can increase a state’s corporate tax revenue, which might provide political motivation. Regardless of whether tax revenues increase, providing targeted incentives gives the appearance that legislatures and policymakers are doing something concrete to generate economic development and solve the problems of the state. In addition, Buss (2001) notes that politicians face little risk from offering these types of incentives. If the firm fails, they can blame it on economic conditions; if it is successful, they can take all the credit. Public choice economics argues that politicians are often shortsighted in their policy judgments, not looking beyond the next election cycle. Furthermore, the state government culture of offering targeted incentives creates opportunities for selected firms to capture the rents and leads to either further rent-seeking activity or cronyism. This type of rent-seeking activity, like all rent-seeking activity, leads to a waste of resources and reduces economic activity.

The political economy of taxing citizens to favor select firms is one that clearly produces political benefit while not delivering on economic growth, jobs, and overall tax revenue. Politicians, by taxing consumers to generate “business friendly” policies, are taxing away choice from consumers and entrepreneurs regarding what business they would otherwise patronize, invest in, or develop. Every state offers some type of targeted tax incentives that create distortions in the economy and limits the ability of the private sector to generate economic growth. These incentives simply create unnecessary competition among states, increasing the incentives offered with little benefit to the state. State governments need to reform their economic development policies to be market friendly and attempt to attract any and all firms by offering greater overall economic freedom. By eliminating targeted tax incentives, states can reduce rent-seeking opportunities and potential political corruption, while competing based on real market conditions that firms actually use to make their decisions.
A tax system that is competitive between states and that attracts businesses and protects property across the board (as opposed to being targeted or discriminatory) will do more to reduce unemployment and generate economic growth than any targeted incentive (Blankart 2002; Hines 2010; Coyne and Moberg 2014).

As a first-choice policy solution, our preference and recommendation is that states cease to offer any type of targeted economic incentives and instead focus on general tax reform and pro-growth public expenditures. Our view mirrors that of Zelinsky (2008): state and local governments play a constructive role in economic development by providing good public services, which make them desirable places to live and invest. The elimination of all targeted tax incentives is a difficult political proposal, as states fear they will lose in this economic development arms race. A second-best proposal would be that state governments engage in a true cost-benefit analysis of the economic incentives they offer. The current economic impact proposals evaluated do not account for the costs of the economic incentives offered, and so they overstate the benefits. In addition, state governments need to offer their citizens a fully transparent accounting of the actual costs of the economic incentives offered to businesses. Few states fully disclose all aspects of their incentive packages. The aspects of the incentive packages that the state discloses are often estimates and not the actual costs of the package. Finally, as a palatable move in the right direction, we recommend full transparency with an actual accounting of the costs of the incentive package over the life of the agreement with the state.

State governments that adopt these policy recommendations would create greater economic investment opportunities for entrepreneurs and firms in their states. These policies would provide greater information to citizens about the true costs of these “business friendly” policies, by revealing the costs associated with firms receiving these targeted incentives. Movements in these directions by state governments would reduce the unintended and perverse existing incentive structure and create more market friendly policies that should generate greater economic growth.

NOTES
1. See Act 231 of 1996, South Carolina Legislature. At the time there was only one tire manufacturer in the state. http://www.scstatehouse.gov/billsearch.php?billnumbers=4397&session=111&summary=B.

2. We need to make a distinction here between competition among states that is related to tax competition or fiscal federalism as discussed in the literature (Tiebout 1956; Brennan and Buchanan 1980; Oates 2011) and the political competition to attract firms using tax incentives that are targeted only to a specific firm. The former is a desirable form of competition.
thought to harmonize tax policy and restrain governments, whereas we argue that the latter is wasteful and ineffective.

3. Mauey and Spiegel (1995) and Bartik (2002) question whether benefits outweigh these costs. Bartik (1994) argues that development incentives provide the greatest benefit to high unemployment areas. However, he notes that state governments often attract firms to areas that have low unemployment, limiting the benefits that a state may receive from these types of incentives. Calcagno and Thompson (2004) find that targeted incentives merely reallocate resources rather than generate real economic growth.


5. At the core of this issue is a knowledge problem, as illustrated by F. A. Hayek (1945). Along with a division of labor there is a division of knowledge, and no one entity or small group of individuals has all the knowledge necessary, much of which is relevant to time and place, to plan these kinds of economic development incentives.


7. Statistical results available from the authors (Calcagno and Hefner 2016a,b).

8. As noted above, potential increases in corporate tax revenue do not equate to overall increases in tax revenue. However, if politicians are tax revenue maximizers they may see these policies as a way to gain some additional tax revenue while promising economic prosperity.

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