

# Corporate Taxes and State Economic Growth

Peter S. Fisher

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## **Iowa Fiscal Partnership**

*The Iowa Fiscal Partnership is a joint initiative of the Iowa Policy Project and the Child & Family Policy Center, two nonprofit, nonpartisan Iowa-based organizations that cooperate in analysis of tax policy and budget issues facing Iowans.*

## Corporate Taxes and State Economic Growth

By Peter S. Fisher

When businesses contemplate a major facility expansion or relocation, they naturally ask themselves: Where is the best place for this facility to be? When evaluating alternative locations, a firm will consider a wide range of factors that affect its costs, productivity or sales: access to markets and to suppliers; transportation costs; energy costs; access to a pool of labor with appropriate education and skills; wage rates; health care costs; land acquisition costs; access to supporting business services; the quality of schools, recreation opportunities, climate and other amenities important in attracting skilled labor; proximity to university research facilities; the quality of state and local government services, such as public safety and infrastructure; and state and local taxes.

Proponents of business tax breaks claim that taxes are a significant factor in the location choices of businesses, and that a state can tax-cut its way to economic growth and generate tax revenue in the process. As we will see, there are good reasons to be skeptical of such a claim, and several decades of research on the relation between state taxes and growth confirm that such claims are vastly overblown and sometimes completely misleading. Business tax breaks turn out to be an expensive and inefficient way to attempt to stimulate a state economy.

Some have pushed the argument even further, proposing elimination of corporate income taxes altogether. There is a strong case, however, for state taxation of corporations. Corporations doing business in a state benefit from the investments that state government has made in education, infrastructure and public safety services. Government is responsible for educating workers and the children of those workers, and for building, maintaining and policing the roads that businesses rely upon. Since a corporation's ability to generate profits from its operations in a state depends on public services, corporations should pay their share of the cost of providing those services. Shareholders, the majority of whom reside outside the state, should not get a free ride, earning more dividends because of the failure of a state to charge for the public costs of doing business.

### **State Corporate Taxes are a Small Part of the Cost of Doing Business**

State corporate tax breaks are alleged to have substantial influence on a corporation's decision about where to expand or to locate a new plant. There is good reason to be skeptical of such claims at the outset, for a simple reason: Differences in state corporate income taxes from one state to another are usually trivial when stacked up against differences in other costs of doing business.

State and local taxes on businesses (corporate income taxes, sales taxes, local property taxes) represent only about 1.8 percent of total business costs on average for all states.<sup>i</sup> Corporate income taxes, in turn, are only about 9.5 percent of the small amount of state and local taxes on businesses, according to one estimate.<sup>ii</sup> A large corporate tax break that reduces corporate income tax revenue by half thus represents a cost savings to the average firm of 50 percent times 9.5 percent times 1.8 percent, or just .09 percent. In other words, such a sizeable corporate income tax break would reduce total business costs by just nine-hundredths of 1 percent in the average state.

Now let us imagine a business planning the location of a new facility. After considering all the non-tax differences between State X and other states — labor skills, energy costs, access to markets, etc. — the firm determines that State X is not the best location. It is difficult to imagine that the tiny reduction in business costs produced by even a large corporate income tax break could offset all the disadvantages in such a case and tip the balance in favor of State X, in anything but a very small number of instances. Yet this is precisely what would have to happen, lots of times involving lots of jobs, for the tax breaks to generate significant job growth. For all those other instances where State X is already the best location, based on all other considerations, the tax breaks obviously do not change the decision but are merely a windfall to a company.

We need not rely on this common sense presumption that tax differences can have little effect on location decisions and state growth, however. There has been a large body of research investigating precisely this question. It is to this research that we now turn.

### **Research Shows at Most a Small Effect of Taxes**

If taxes affect business location decisions, then states with lower taxes should experience more rapid growth, other things equal. The last phrase, “other things equal,” turns out to be crucial. Anyone can make a list of states with higher tax rates, for example, and another list with lower tax rates, and then see which set of states grew faster over some time period. Many people, in fact, have done just that, but such an exercise proves absolutely nothing about causality. Such “research” is no more useful than a “study” I conducted showing that states with names of six letters or less grew faster than ones with long names.

As we pointed out above, a great many factors influence business location decisions and state economic growth rates. To discern the separate effect of tax levels, researchers must use statistical techniques to hold all these other factors constant. The question is: If two states are similar in terms of labor skills, access to markets and materials, labor and energy costs, etc., will a difference in taxes on business produce a difference in the rate at which the state grows? Statistical techniques have become increasingly sophisticated over the past 25 years, allowing for better ways of controlling for other location determinants and more reliable answers to this question.

Two summaries of the research, in 1988 (by Newman and Sullivan) and 1991 (by Bartik), produced something of a consensus on the independent effect of state taxes on state growth. The research conclusions were expressed in terms of “elasticity,” a measure of how sensitive growth is to taxes. The elasticity of state GDP with respect to state taxes, for example, is the percentage change in GDP divided by the percentage change in taxes. Bartik’s review of 59 studies completed prior to 1991, including 34 studies that attempted to measure the effects of business taxes on state output, led him to conclude that the bulk of the credible research indicated an elasticity somewhere between -.1 and -.6, and probably about -.3. What does this mean? It means that a 10 percent reduction in taxes will lead eventually to an increase in the state GDP of 3 percent (+3 percent divided by -10 percent is -.3).

Not everyone agreed with this consensus position. Economists Therese McGuire (1992) and Dick Netzer (1997), in particular, pointed out the inconsistencies among the studies and remained skeptical that taxes had any significant effect. Since that time, additional studies have been conducted and several summaries and reviews of those studies have been published. Phillips and Goss (1995), running a meta-regression study on Bartik’s literature, seemed to confirm the reasons for Bartik’s findings. Later in the 1990s the Federal Reserve Bank of Boston commissioned a series of reviews of the economic development literature. Wasylenko (1997), looking at the most recent tax studies as well as those reviewed by Bartik, concluded that the likely impact of taxes is somewhat smaller, an elasticity of -.2

being his best estimate. Other reviews of the literature since then indicate that the research continues to produce mixed results.<sup>iii</sup>

It appears that the preponderance of the evidence from many dozens of studies over a period of 30 years or more is that business tax cuts, *if they could be enacted without cutting public spending*, have some positive effect on state economic growth, but that this effect is quite small. Not every study has come to this conclusion, to be sure, and some economists, such as Therese McGuire (2003), remain skeptical. She points out that many of the studies that have been relied upon the most cannot be replicated in other time periods.<sup>iv</sup> Furthermore, no one has yet produced a plausible explanation for another consistent finding: Labor costs are many times state and local taxes, yet the elasticities found for wages are only two or three times the tax elasticities.<sup>v</sup> If the labor elasticities are correct, the tax elasticities should be much smaller than  $-0.2$ .

### **What the Research Does Not Show**

It is important to understand the limitations and correct interpretation of these research results. For example, an elasticity of  $-0.2$  does not show that a 10 percent cut in the corporate income tax would produce a 2 percent increase in economic activity. The corporate income tax is only about 9.5 percent of total state and local taxes on business, so a 10 percent cut in corporate income taxes is equivalent to a 0.95 percent cut in overall business taxation, which would lead to just a 0.19 percent increase in the economy (a 0.95 percent tax cut times the elasticity of 2 percent).

Most important, the research does not imply that a 10 percent cut in taxes on business that is paid for by cutting 10 percent of the state budget would produce 2 percent growth. Such a balanced budget policy (and states of course must balance their budgets) might produce no growth at all, especially in the long run.

### **Public Services Matter**

It is important to understand exactly what the research on the sensitivity of growth to taxes implies for state policy. States must balance their budgets. Since tax breaks are costly, these costs must be offset, either by increased revenues elsewhere or by cuts in state services. Cuts in state services can increase business costs and negatively affect state growth in a variety of ways.

Researchers have studied the relation between public services and state economic growth. Ronald Fisher reviewed 43 such studies in 1997 and reported that 27 of the studies found that increased public spending had a positive effect on state economic growth. Helms (1985), for example, found that increases in taxes that financed more spending on health, highways, education or other public services contributed positively and significantly to state economic growth. Bartik (1989) found positive effects on the rate of small-business formation from additional education and fire protection spending financed by tax increases. Among all the studies Fisher reviewed, spending on transportation, education, and public safety were the services most likely to produce measurable effects on growth. The results varied widely, however, and he could not discern a consensus on the magnitude of these effects, which in some studies were smaller and in others larger than the magnitude of tax effects.

While the exact effect of public expenditure on the state economy has been difficult to pin down, it is clear that much of what state and local governments do is to provide the foundations for economic growth in the long run. There would not be a functioning economic system without the infrastructure to support it, and much of that infrastructure is provided and maintained by state and local governments: streets and highways, water and sewer systems, port facilities, airports, reservoirs. And an economic system cannot function without a healthy and educated labor force; the increasing skill requirements in the private sector cannot be met without significant commitments of resources to public education. In

fact, a recent study found that the education level of the workforce in a state was the primary determinant, along with the rate of patents, of which states experienced more rapid growth in incomes from 1939 to 2004.<sup>vi</sup> Furthermore, the ability to attract workers to new jobs, particularly for higher skill jobs in technology sectors, depends in no small measure on the quality of life, which includes the quality of the schools those workers will send their children to, and the quality of public services and public recreation facilities available.

It is important to point out, therefore, that the positive effects of tax cuts identified in the research show up for the most part only when studies control for the level of public services. This means that tax cuts might promote growth holding everything else constant, including state spending on education, health, infrastructure and public safety. Since states must balance their budgets, in practice spending cannot be held constant. As Bartik wrote in 1991: “[A]n economic development policy of business tax cuts may fail to increase jobs in a state or metropolitan area if it leads to a deterioration of public services to business. An economic development policy of tax increases may succeed in increasing jobs if it significantly improves public services to business.”<sup>vii</sup>

Thus any estimates of the employment effects of tax breaks, even if based on an elasticity of -.2, are undoubtedly overstated. They fail to account for the negative effects of state spending cuts on the economy. And they fail to account for the very likely reduction in public sector jobs necessitated to pay for the tax breaks. These job losses would be immediate. The result is that the tax breaks would very likely produce a net loss in total jobs for several years. And this accounts only for the direct loss in public sector jobs; a long-term decline in public services would have additional negative effects on state private sector growth.

Large jobs effects from cuts in taxes are not credible for another reason: State economic growth has been shown to be more affected by the rate of new firm formation than by any other factor.<sup>viii</sup> Most tax breaks do nothing to enhance the prospects for a new firm.

### **A Zero-Sum Game**

Incentives may have more effect on altering a firm’s choice of location within a labor market or a metropolitan area, than in affecting the choice of which state or metro area to focus on in the first place. This is because most of the non-tax costs of doing business may be the same within a metro area, so that local differences in taxes may come into play. But tax or incentive-induced shifts within a labor market produce no benefits for the state as a whole or for the local labor market. The same number of jobs exist and are likely filled by pretty much the same people; some will have longer commutes, some shorter. The incentives merely shift activity around, with no net gain for the region or the state, but with a loss of local tax revenue. State governments should not facilitate such beggar-thy-neighbor competition among their own local governments.

A zero-sum outcome is likely to prevail even where a state line runs through a metro area; the labor market is metro wide and jobs for a state’s residents do not disappear just because they fall on the other side of the state line. State X might well be better off letting the border state Y pay for upgrading the infrastructure, providing incentives, and incurring other costs associated with a new plant, while X sits back and just reaps the benefits of more job opportunities. While state Y appears to have gained tax base, they will likely have given up much or all of that for a number of years in the competition to secure the plant, and incurred costs that exceed any revenue gains. Given the mobility of such firms, the hoped-for eventual increase in tax revenue, when incentives expire, may never materialize.

Even where a business is induced to locate within a state when it otherwise would not have, there may be no net gain in economic activity or jobs or income. A Walmart store, for example, may take advantage of a tax break to open a new store, but in doing so will diminish the sales and viability of

existing Main Street businesses. Walmart is not creating new economic activity, but shifting where that economic activity is focused. In fact, there is no case for subsidizing local market activities such as retail; if the market can support the additional activity, we can be sure that private enterprise will take advantage of that market without any subsidy needed. If the subsidy is needed, it is because the market cannot support an increase in businesses, so a new firm will merely steal sales from existing firms, with no net benefit to the locality. Similarly, a new corporation coming into a community and given an economic advantage may simply hire talent from other corporations in the area because of that advantage, not necessarily increasing overall productivity, and in fact making those businesses less viable. For these reasons, the conservative Tax Foundation argues against special incentives and breaks to seek to attract certain types of businesses as creating diseconomies that work against free market principles for economic growth and activity.

### **Tax Breaks Are Costly**

Corporate tax breaks are a very inefficient means of promoting state economic growth. Most of the lost revenue simply flows to corporations who are doing nothing different, nothing that they wouldn't have done anyway.<sup>ix</sup> And this accords with common sense. As we saw, a corporate tax cut is a tiny share of a business' costs, so that the vast majority of location or investment decisions will hinge on factors other than taxes.

Much of the benefit of corporate tax breaks will go to economic sectors that are tied to local markets: retail trade, utilities, transportation, and services. These are industries that have to be where their market is. If the market grows, they will grow; state taxes have nothing to do with it, and the tax breaks are simply a windfall, with no effect on growth. In fact, the loss of public sector employment and purchasing power brought about by the tax breaks will have a detrimental effect on sectors dependent on local consumer purchases. The tax breaks to corporations do not stimulate consumer spending, and it is not clear how retailers can collect more sales tax if consumers are not spending any more money. The tiny reduction in the costs of doing business cannot be expected to translate into retail price reductions, which is the only way sales could increase in the absence of a shift in the consumer demand curve.

Yet some will claim that tax breaks more than pay for themselves. Such conclusions may follow from analyses that include personal income tax revenues from new employees in addition to the direct business taxes from the firms creating the jobs. But research shows that in the long run a large majority of new jobs are filled by in-migrants.<sup>x</sup> Those workers bring with them families, with children who need to be educated, and they bring cars that help to create the need for new streets and highways. If these secondary fiscal effects were fully accounted for it is likely that the additional public costs associated with increased population would eat up all of the additional tax revenue they would bring. After all, state and local governments must balance their budgets, and they do so by using the additional taxes brought by growth to pay for the additional services necessitated. In fact, it could well be that the direct fiscal effect — the change in business tax revenue associated with a tax break — is even more negative than described above, as the business activity itself may necessitate some additional investment in public infrastructure. It is clear, at any rate, that to treat new workers as if they only contributed to the revenue side of the public budget and not the expenditure side is plainly wrong and misleading.

### **Debunking the Counterarguments**

***The unilateral disarmament argument: We have to do it because everyone else does.***

Disarming unilaterally is easy once you recognize that the states are shooting at each other with very expensive popguns. If incentives are costly and inefficient, let your competitor states continue to squander their money on them, and pursue instead a smarter and more cost-effective approach to

economic development that focuses on long-run fundamentals: quality education, job training and infrastructure.

***Taxes may be a small share of costs, but they are a big share of profits so they matter a lot.***

This is a complete non-issue. Certainly what matters to business is the bottom line, but the bottom line, or profit, is simply total sales minus total costs. The way states attempt to affect the bottom line is to reduce a firm's costs, since states can do little or nothing to affect sales. Of course taxes are a higher percentage of profits than they are of costs; every component of cost is a higher percentage of profit than it is of costs. Labor costs are many times net profit. The point remains: A firm with a given level of sales seeking to maximize profit will do so by seeking to minimize total costs, and most other components of cost are far more important than state and local taxes. Thus even large changes in state and local taxes are unlikely to offset small changes in other more important costs in most instances.

***We know they work, because we deal with corporations every day and they say taxes matter.***

Businesses engaging in tax incentive competition recognize that it is in their interest to argue, before and after receiving incentives, that taxes matter. This provides essential cover for the politicians who have provided them with the incentives, and for the economic development officials trying to justify their jobs and expense accounts. No one this close to the situation is in a position to assess objectively whether any given location or investment decision hinged on tax breaks. That's why we look to unbiased research to see if tax breaks have actually affected state economic growth.

***Economist X's brand new study of our state's tax breaks showed very large job effects. Generalizations based on outdated studies are meaningless.***

A new research study specific to the particular state and incentive in question may show that tax breaks are very effective, and it will be argued that this is the only research of any relevance. All previous research on the effects of incentives in general is dismissed as meaningless. In response, it can be pointed out that a business cares about another dollar flowing to profits, but not which path it took through the tax code to get there. A dollar gained is a dollar gained. There is no rationale for an assertion that a dollar of profit resulting from the incentive that is the focus of this study (single sales factor, for example) is more important to a firm than a dollar of profit flowing from a reduction in the top tax rate, or some other tax code change.

Furthermore, to present one study as the definitive answer to the question about the effects of tax policy on business location decisions is to adopt a completely indefensible position on how social science research in this area should be used for policy purposes. A responsible researcher looks at the entire body of research over many years to determine which results have stood the test of time and have been replicated by different researchers looking at different places and time periods, and which studies are outliers that should be written off. Many studies have shown no effect of taxes, others have shown very large effects. But the preponderance of the evidence is that the effects are small, and in fact may be non-existent if offset by cuts in services. For someone to pick one study out of the many dozens that have been conducted, a study whose results clearly put it in the category of outliers, and then to base policy recommendations on that one study is irresponsible and shows cavalier disregard for the careful use of social science research in this area. To assert that all prior research is outdated is disingenuous at best. Being new is less important than being done well and being corroborated by others. That is how real science proceeds.

***The unspoken political argument: Cutting incentives, or even voting against an increase, is risky because our opponents will tag us as "job destroyers" the next time a plant goes somewhere else, while increasing incentives appears costless (it's a tax cut that creates revenue!) and we can happily take credit for all future job creation.***



This is the most difficult argument of all to counter. Other than the point about tax cuts paying for themselves, the arguments are pretty much immune to fact-based criticism.

## Conclusion

Business tax breaks are an expensive and inefficient way to attempt to stimulate a state economy. Because of the small effect of tax breaks on business costs, and the much larger importance of other production costs and location considerations, tax breaks will have little if any positive effect on private-sector employment. In fact, the revenue losses may well produce immediate public-sector job losses. Furthermore, the private-sector employment effects of such tax cuts could be reduced or even eliminated by a long-term deterioration in the quality of public services, which themselves have been shown to be important to businesses making location decisions, and which provide an important part of the foundation for the state economy.

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## Notes

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<sup>i</sup>This is based on data averaged over three years 2005-2007 from two sources: U.S. Internal Revenue Service, Statistics of Income, Integrated Business Data for all U.S. Corporations, partnerships, and non-farm proprietorships, showing total deductions for business costs on tax returns, at [http://www.irs.gov/taxstats/bustaxstats/article/0,,id=152029\\_00.html](http://www.irs.gov/taxstats/bustaxstats/article/0,,id=152029_00.html) ; and a 2009 report by the Council on State Taxation, which estimates total state and local taxes paid by businesses, available at <http://www.cost.org/Page.aspx?id=69654> .

<sup>ii</sup> Council on State Taxation (see note 1). This is the average proportion over the three years 2005 to 2007; the fraction is lower in recession years.

<sup>iii</sup> See Peters and Fisher (2004); Weiner (2010); Funderburg et al (2010).

<sup>iv</sup> See, for example, Tannenwald (1996); Carroll and Wasylenko (1994).

<sup>v</sup> Lynch (2004).

<sup>vi</sup> Bauer et al (2006).

<sup>vii</sup> Page 8.

<sup>viii</sup> Bruce et al (2007).

<sup>ix</sup> The negative fiscal effects of business tax breaks and incentives at the state level have been shown in Bartik (1994); Fisher and Peters (2001); and Peters and Fisher (2002), chapter 5.

<sup>x</sup> Bartik (1991), p. 95; Bartik (1993).