

# A Brief Examination of Tax Incentive Research

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## Background

Tax competition occurs when governments (federal, state and local) lower fiscal burdens (taxes and fees) to encourage the inflow of productive resources or discourage their outflow. Attracting business investment and human capital by lowering the overall level of taxation is a goal of economic development policy and practice. While a broad base and low rates are commonly touted as the ideal tax structure, a variety of types of special tax treatment are used by state and local governments to be competitive. Economic development incentives, specifically tax incentives, are used as state and local governments compete for productive resources. Governments offer these incentives to encourage the location and expansion of businesses and associated employment growth. Here we review briefly some of the newest research on the issue, and offer a brief summary.

## Tax Incentive Research

Tax competitiveness is one facet of general market competitiveness. Much research argues that it is one of the less important elements of competitiveness with other factors such as labor costs, human capital (education skills of workers), and stability (political, legal, and regulatory) being more important. However, each state offers some menu of tax incentives that may serve as an indicator of a positive business climate. If we accept this premise, then the issue becomes how to offer incentives in a responsible, cost-effective way.

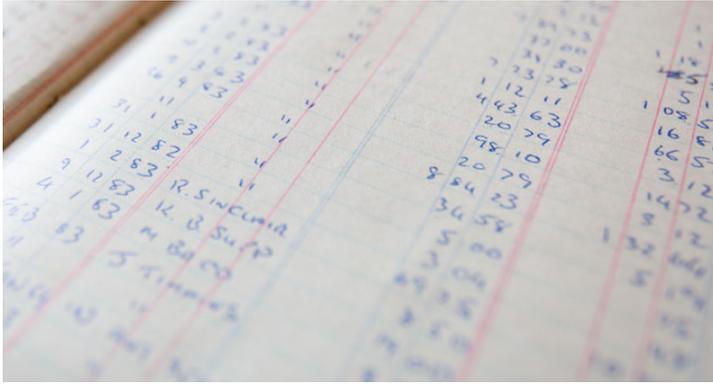
Research has also shown that both tax burdens and public service quality affect the firm location decision (Zodrow and Mieszkowski 1986). Reducing tax burdens to the point that the quality of public services are diminished affects economic (market) competitiveness and at the extreme can lead to a race to the

bottom. Public services and other local amenities matter both to businesses and individuals.

Much of the focus on tax competitiveness is on business tax rates and levels, but individuals also respond to tax differences and public service differences both within and among states. Much recent research stemming from Florida's (2002) *Rise of the Creative Class* has documented the impacts of non-tax factors on regional economic growth. Jobs attract people to a region, but a skilled workforce also attracts quality jobs, and a variety of quality-of-place amenities attract skilled people.

Modifying the tax system to increase competitiveness may actually increase complexity. The issuance of tax incentives increases the administrative burden of the tax and also increases compliance costs if businesses provide reports to governments. There are also equity issues if new businesses or expanding businesses receive tax breaks through incentives that are not available to other businesses in the same area. In general, the research evaluating the effectiveness of tax incentives has shown that the impact is relatively small or nonexistent. However, statistical analysis of state tax incentives to date has been ad hoc in nature and limited to a few states where researchers have either gathered or had access to the appropriate data.

The last few decades have seen an acceleration of this research and urgent calls for policy analysis due to ongoing fiscal stress in most states. A relatively small number of studies attempted to evaluate the influence of individual targeted tax policies on economic growth. A number of these have been reviewed by Bartik (2002). Often policies that are implemented to make a state or local area more competitive do not have the intended effect or as large an effect as anticipated. Some of the tax policies that state and local governments commonly employ to be more



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“competitive” are tax incentives including state income tax credits, training and infrastructure grants, and local property tax abatement and tax increment financing.

### Recent Studies

Notable recent studies include Gabe and Kraybill (2002), who evaluate firm-level tax incentives on over 350 firms in Ohio; Faulk (2002), who examines the impact of firm-level tax credits in Georgia; and Sohn and Knapp (2002), who evaluate firm-level tax incentives in Maryland from 1994 to 1998. Sohn and Knapp (2002) found that targeted incentives in Maryland generate some mild positive regional and sector-specific impacts, but conclusions regarding their magnitude were beyond the capacity of the available data. Gabe and Kraybill (2002) analyzed firms in Ohio from 1993 through 1995, which received targeted tax incentives. Using a treatment and control pool of over 350 firms, these authors discovered two phenomenon of interest. First, self-reported employment growth in firms receiving the incentive was substantially overstated. Firms that did not participate in the program were more accurate. Secondly, they found no positive, and in some instances a negative influence of the tax credit on job growth. Faulk (2002) examined eligible firms in Georgia that received and did not receive targeted incentives between 1993 and 1995 and found that firms receiving the incentive created more jobs.

Greenstone and Moretti (2004) constructed a quasi-experimental sample of plant openings using site selector data. This data included both the county in which a plant located and other counties considered by the firm. The authors reported growth in earnings (a one-time increase of 1.5 percent), and a one-time 1.1 percent increase in property values in the counties in which the new plants located.

More recent studies that find little real regional impact associated with new large firms include Edmiston (2004), Fox and Murray (2004), Hicks (2004, 2007), and Hicks and LaFaive (2011). Edmiston finds that the impact of new large firms is almost always overstated, with actual multipliers often less than one. He further states that expansion of existing firms generate substantial effects, exceeding those of new firms. Fox and Murray test the local impacts of large firm relocation and report no significant net impacts in the regions in which they locate. Using a quasi-experimental approach, Hicks (2004) found that large gambling and wholesale/retail facilities

generate no net employment or income gains in the counties in which they locate.

Of the more contemporary studies of direct business aid, Hicks (2007) reported that extensive grants to a single large firm across many U.S. jurisdictions failed to generate net employment growth despite what was in several instances more than \$50 million invested in a single firm. Hicks and LaFaive (2011) estimated the impact of Michigan’s Economic Growth Authority (MEGA) incentives on county employment growth in manufacturing, wholesale, and construction. The manufacturing and wholesale targeted incentives had no discernible effect on employment in these sectors. However, the receipt of an incentive increased construction employment, with job effects of roughly \$125,000 per construction job. In these studies it is both the effectiveness and the theoretical usefulness of targeted business incentives on particular industries that are cast into doubt.

### State Economic Development Incentives in Indiana

In a report analyzing the broad impacts of state economic development incentives offered through IEDC along with local property tax abatement (Faulk and Hicks 2013), we aggregated the amount of incentives provided to businesses in a county to get a county total for each year between 2005 and 2010, and, using well-known economic modeling techniques, examined the impact of these incentives on total employment, manufacturing employment, and earnings. We found one new job is created for each \$6,000 to \$8,000 in state and local incentives offered through IEDC projects. IEDC projects have no discernible impact on average earnings at the county level. In models examining specific incentives, we find that 5.3 to 6.1 jobs per \$1,000 of tax credit are associated with the EDGE tax credit, a tax credit granted for increasing employment. In contrast, \$1 million in local property tax abatement is associated with 7 to 8 new jobs. This last finding raises questions about the efficacy of local tax abatement.

The Hoosier Business Investment Tax Credit (HBI), which is a percentage of capital investment, and the Skills Enhancement Fund (SEF), which reimburses training expenses, are more difficult to evaluate. We find no statistically significant association between HBI and employment over the five years of data examined but recognize that a longer time period is needed to adequately assess the impact of this credit. For SEF, we find that each \$1,000 in state expenditures on

training grants is associated with about 25 new jobs in counties with businesses receiving these grants. We believe more work needs to be done to assess the impact of SEF on earnings.

In a separate study, we analyzed the effects of particular types of economic development spending on job creation and business investment (Hicks, Faulk, Heupel, and Kemper 2013) and found positive effects of spending on business finance, business attraction, and domestic recruitment. Spending on international trade offices is statistically correlated with greater exports. We found no statistically identifiable relationship between job growth or investment and business assistance, workforce development, technology transfer, or film development, so we recommend that programs in these areas be reviewed.

We also examined the distribution of IEDC projects around the state and found that there are projects in urban and rural places as well as fast and slow growing counties. IEDC projects are widely distributed around the state.

### Local Property Tax Abatement in Indiana

Not much is known about the relative costs and benefits of local property tax abatement in Indiana. The studies we have conducted indicate that in the long term the number of new jobs associated with property tax abatement in a given county is small (between seven and eight new jobs per \$1 million of abated property value in the typical county over a 10-year period). Additional analysis suggests that abatement is not particularly effective as an economic development tool. After finding the poor job impact of abatement in the IEDC study, we examined the relationship between property tax abatement and tax rates and assessed value (Hicks and Faulk 2013). We found that counties that regularly use abatement have higher property tax rates. Counties that abate a more property have higher tax rates. For every 1.0 percent increase in abatement, the property tax base increased by only 0.2 percent; there is no evidence that abatement grows the property tax base substantially over time.

The elimination of the personal property tax is essentially 100 percent abatement and will lead to shifts in property tax payments among property classes (personal to real) and among taxpayers (Stafford and DeBoer 2014). Local governments currently abate about 25 percent of gross personal property assessed value in the state.

Tax increment financing (TIF) is another fiscal tool that has received little scrutiny in Indiana. In a current working paper examining the impact of TIF districts in Indiana counties (Hicks, Faulk, and Quirin 2014), we use data on the amount of assessed value in TIF districts in a county from 2002-2012. We find that TIF districts increase the property tax rate in non-TIF districts in a county. Specifically, a 1.0 percent increase in the share of assessed value in a TIF is associated with a 0.3 to 0.7 percent increase in the tax rate in non-TIF area of a county. We go on to examine the relationship between TIFs and capital investment, employment and wages. We find that TIFs have no statistically significant impact or an impact that is negative but too small to be of economic consequence. These findings suggest that TIFs are not an effective economic development tool

and instead act as a budget management tool for local governments. We recommend that current TIF policies be reviewed and that TIF reporting should be made more transparent.

Property tax caps have added another aspect to tax competitiveness. The caps have added stability to the property tax system in that taxpayers know that maximum rate they will pay. At the same time they have dramatically affected some local government budgets while having little effect on others (Faulk 2013). The various impacts of property tax caps should be studied.

### Summary

Tax incentives have received growing attention from economists who evaluate a wide range of issues regarding the incentives. However, there is not a clear consensus on many questions surrounding tax incentives. This is primarily due to data limitations or technical limitations involved with isolating the impact of incentives. Nonetheless, we can place the size and scope of Indiana incentives that are currently offered against those of other states. Some research on the issue permits us to also contextualize the potential effectiveness of Indiana incentives at the state and local level.

Indiana currently offers a relatively narrow suite of state tax incentives. The EDGE tax credit appears to be relatively cost effective, in that the cost of new job associated with the incentive is lower than other similar programs that have been studied. However, this same research and subsequent analysis finds that Indiana's local tax incentives are not performing as well in terms of cost and net new employment. We believe more work needs to be done to understand the impacts of local incentives, particularly property tax abatement and tax increment financing, which have received little evaluation to date.

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