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by

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I appreciate the opportunity to testify before the Tax Restructuring Subcommittee this morning. You are to be commended for being willing to consider fundamental reforms to Michigan's tax system.

My testimony this morning is closely related to extensive research I have done over the years on what affects state and local economic development (the references to this paper provide some citations to relevant papers and books I have written). More specifically, I want to discuss what role reforming Michigan's business taxes can plausibly play in increasing the state's economic development.

There is a majority view among economists on the effects of state and local business taxes on economic development. As stated by Wasylenko (1997), which in turn largely draws on Bartik's (1991) review of 57 studies, a 10% decrease in overall state and local business taxes, holding public services and other location factors constant, increases the long-run level of economic activity in a state (e.g., employment, gross state product) by about 2%. The percentage effects on state economic activity would go up or down proportionately for different percentage decreases or increases in overall state or local business taxes. These are the effects on economic development for percentage changes in overall state and local business taxes; the effects on economic development of a percentage change in any particular state or local business tax, which is just one portion of the overall state and local business tax burden, would be lower. For example, Michigan's Single Business Tax is estimated to comprise about 14% of overall state and local business taxes in Michigan.[1] Therefore, a 10% decrease in the Single Business Tax,

[1]This is based on a recent study by Ernst and Young (2005) that state and local business taxes in Michigan are about $14 billion; Single Business Tax revenues are roughly $1.9 billion.

holding public services and other location factors constant, would be estimated to increase long-run business activity in Michigan by about 3/10ths of 1%.[2]

What are implications of these estimated effects of business taxes on state economic development? First, there is clearly no Laffer Curve rationale for a revenue gain from cuts in state business taxes. To get a gain in business tax revenues from cuts in state and local business taxes, a cut in overall state and business tax rates by 10% would have to increase the business tax base by more than 10%. The scholarly consensus is that the effect of a 10% business tax cut is to increase business activity and hence the business tax base by only 2%, which is only 1/5th of the responsiveness one would need to get an increase in business tax revenue. Therefore, although cuts in state and local business tax rates can under some circumstances boost a state's economy, these cuts will also result in a net loss in business tax revenue.

Second, an across-the-board cut in state and local business taxes is a relatively expensive way of creating jobs in the state. Based on estimates that total state and local business tax revenue per job in Michigan is about $4,000, an across-the-board cut in business taxes would have an annual cost of about $16,000 per job created.[3] This calculation assumes that the cut in business taxes is financed in a way that does not require cuts in public services, for example by

[2]A 10% decrease in the SBT decreases overall Michigan state and local business taxes by 14% of 10%, or 1.4%, and a 1.4% decrease in overall state and local business taxes would have 14% of the effects of a 10% decrease in overall state and local business taxes of 2%, and 14% of 2% is about 3/10ths of 1%.

[3]The type of calculation behind these numbers has been presented in several scholarly publications (Bartik, 2005a, 2004a, 1992). The basic calculation is as follows. Suppose total business tax revenue R is equal to the tax rate per job T times the number of jobs J, or $R = T * J$. Then for a small change in the business tax rate, the total change in business tax revenue is $dR = J * dT + T * dJ$. Then some manipulation of this expression indicates that the business tax revenue effect per job created is equal to $dR/dJ = (T / E) + T$. E here is the elasticity of state business activity with respect to the state and local business tax rate, that is the percentage effect on business activity of a percentage change in overall state and local business taxes, or $(dJ / J) / (dT / T)$. The estimated elasticity, as stated in the text, is −0.2, that is a the ratio of the percentage change in business activity with respect to a percentage change in business taxes is −0.2, or a 10% reduction in business taxes increases business activity by 2%. The estimate of Michigan business tax revenue per employee, updated to 2005 dollars, is $3,946 per employee (Ernst and Young, 2004). Plugging these numbers in gives a cost per job created from business tax cuts of $15,784.

increasing household taxes. This calculation also allows for increases in business tax revenues from the new jobs created by the tax cut, but does not adjust for any increases in required public services due to the newly created jobs. Furthermore, it should be noted that this $16,000 cost is an annual ongoing cost in foregone business tax revenue, not a one-time cost. Using a real discount rate of 3%, the present value of the cost per job created would be a little over one-half million.[4]

A $16,000 cost per job created, paid by higher household taxes, might seem worthwhile to create an average job that perhaps pays $35,000 per year. However, research studies indicate that when new jobs are created in a state, there is considerable in-migration. Estimates suggest that for every five new jobs created in a state, four go to persons who otherwise would have lived in another state (Bartik, 1993). Therefore, it is not clear that Michigan households should be willing to pay $16,000 for a $35,000 job if the odds are that this job will go to someone who currently does not live in Michigan. Finally, a full benefit-cost analysis of the economic development effects of business tax cuts would have to take into account many other factors, such as environmental issues, household taxes, increases in public service costs, congestion costs, and who gets the Michigan share of the new jobs (Bartik, 2005a, 1991).

Third, the same studies that show that business tax cuts affect job creation also show that public services affect job creation. There are several studies that suggest that business tax cuts, if financed by cutting productive public investments such as spending on infrastructure or spending on education, will in the long-run hurt a state's economic development (e.g., see reviews by

[4]$15,784 divided by 0.03 = $526,133.

Fisher (1997) and Bartik (2005b) and studies by Bartik (1999, 1989), Munnell (1990), and Helms (1985)).

I want to be clear that although there is a majority view within the economics profession that the effects of business taxes upon state economic development are modest, there are other views among economists. There is a sizable minority among economists who thinks that state and local business tax effects on economic development are so small as to be negligible (for example, see McGuire, 2003). This group of economists bases their position on the fact that although the effect of business taxes on economic development averaged across different studies is modest, many well-done studies find no business tax effects on economic development. Therefore, their argument is that the research evidence for business tax effects is too fragile for state policymakers to rely on such effects in making tax policy. In addition, there is a much smaller minority in the economics profession who thinks that business tax effects on state economic development are larger than believed by the majority of economists.

Why are business tax effects on state economic development so modest? I think the biggest reason is that variations in state and local business taxes really aren't that large compared to many other local costs of production. For example, overall state and local business taxes in Michigan are estimated to be about $3,946 annually per employees. In the lowest business tax state (Utah), overall state and local business taxes are $2,588 annually per employee.[5] The difference between Utah and Michigan in business taxes per employee is about $1,358, which is only about 68 cents per hour for a full-time full-year employee who works 2000 hours per year.

[5]These estimated taxes per employee come from Ernst and Young (2004) figures for 2003, updated to 2005 dollars using changes in the Consumer Price Index.

Average hourly wages in the U.S. are about $18 per hour,[6] so the variation across states in business taxes can readily be offset by modest changes in wages, benefits, or labor productivity levels. In addition, because any given business tax is typically only a small proportion of overall business taxes, the effects of even abolishing a business tax are not large compared to other costs. For example, abolishing the Michigan Single Business Tax would be equivalent in its cost reduction impact to reducing wage rates of full-time employees by about 27 cents per hour.[7]

Given the likely modest effects of business taxes on state economic development, what principles should be taken into account in considering business tax reforms that might allow us to have positive effects on economic development at a lower cost to households?

First, policymakers should consider that it is the total tax burden on business that matters, not its specific components. The Single Business Tax is only $1.9 billion out of the $14 billion in total state and local business taxes in Michigan. Other business taxes are more important. For example, business property taxes in Michigan are estimated to be $6.2 billion (Ernst and Young, 2005). Business property taxes probably deserve much greater attention from policymakers than the Single Business Tax.

Second, what should matter most in affecting business investment is the marginal tax rate on new business investment, not the average tax rate on existing business capital. It is possible with deductions for new capital investments, or investment tax credits, to have low or even zero

[6]This is based on my calculations of average wages per hour using data from the 2004 Outgoing Rotation Group of the Current Population Survey, updated to 2005 dollars using the CPI. The resulting average wage per hour is $18.27. The average wage including benefits would be higher.

[7]Michigan's Single Business Tax is $1.9 billion out of total state and local business taxes of $14 billion, based on Ernst and Young (2005). Therefore, abolishing the SBT would reduce business tax costs per employee by $535.53 per year (= 3,946 times 1.9 divided by 14). $535.53 divided by 2000 annual work hours is 27 cents per hour.

marginal tax rates on new business investment, and yet sizable average tax rates on existing business capital which will collect considerable revenue.

One of the most serious problems in the business tax debate in the state of Michigan is that neither the Executive branch nor the Legislature has adequate information about how different tax options affect marginal tax rates on business investments. In the debate over the Single Business Tax last year, I saw many analyses reporting how various options would change the average tax rates paid by different industries or different types of businesses. I did not see any analysis that looked at how the different SBT options affected the marginal tax rate on investments in different industries or different types of businesses. It is this marginal tax rate on new investments which affects business location or expansion decisions. Such analyses of marginal tax rates on investments can be readily done if either the Executive or Legislative branch devotes modest resources to creating a hypothetical firm simulation model that can model how different tax options affect the returns to different types of investments by firms. You should ask some combination of the Michigan Treasury Department and the House and Senate Fiscal Agencies to construct such a simulation model.

Third, what should matter most to a state's economic development is the marginal tax rate on business investment by "export-base" businesses. The term "export-base" businesses means businesses that either sell their goods and services outside the state, or compete with businesses that import from other states into this state. For those businesses that sell solely to a local market with no significant outside the state competitors, business taxes are probably largely shifted forwards to consumers, and therefore changes in business taxes probably are offset by change in consumer prices, with little net effect on economic development.

Given those principles of what aspects of state and local business taxes most affect economic development, how does Michigan's business tax system measure up? First, Michigan's overall state and local business taxes are quite competitive, both with the U.S. as a whole, but especially with our nearby states. According to the 2005 study of state and local business taxation by Ernst and Young for the Council on State Taxation, Michigan's state and local business taxes in fiscal year 2004, as a percentage of the value of total private production in the state, were 4.3%. Michigan's overall business tax rate is at or below all our nearby states (see Table 1).

In addition, Michigan's business taxes are below many states that are faster growing. Table 2 ranks all states by their percentage employment growth since the last business cycle peak. Of the top ten fastest growing states over this time period, eight have higher overall state and local business taxes than Michigan. Of the ten slowest growing states over this time period, four have lower overall state and local business taxes than Michigan. If we construct a figure with these data (Figure 1), there is no obvious correlation between state and local business taxes and recent state employment growth trends. The calculated correlation, between state and local average business tax rates, and recent state employment growth trends, is actually positive, that is higher state employment growth is positively associated with higher state business taxes, but the estimated correlation is statistically insignificant.[8] These results from this simple data analysis should not be taken to mean that business taxes don't matter to state economic development. A more rigorous analysis would need to consider multiple business cycle periods, and control for

[8]The estimated correlation is 0.11. A regression of state employment growth on the business tax rate results in an estimated coefficient of 0.52, with a standard error of 0.68 in this coefficient estimate.

many more characteristics of states, for example each state's industrial mix. As mentioned before, on average more rigorous analyses do find modest effects of state business taxes.

Second, what about Michigan's marginal tax rates on business investment? To my knowledge, there hasn't been any recent comprehensive analysis of such marginal tax rates for all states. The best and most recent work on this issue is Peters and Fisher's research (2002) that looks at marginal tax rates on new branch plant investments in the leading industrial states in different industries. In our chapter on Michigan's economic development policy for the *Michigan at the Millennium* book, George Erickcek, Peter Eisinger, and I used Peters and Fisher's data to calculate average marginal business tax rates on new branch plant investment in Michigan compared to our nearby states, both before and after typical economic development incentives. Table 3 reproduces the relevant table from our chapter. What this table shows is that Michigan's business tax rate on new branch plants is quite competitive with our nearby states, even without any incentives. After usual property tax abatements, Michigan is even more competitive than our nearby states. Finally, with either MEGA incentives or Renaissance Zone incentives, Michigan's business tax rates on new branch plants are far below the rates of nearby states. As mentioned previously, we need more of this type of research, which would use modeling of hypothetical firms to consider a much broader variety of business investment decisions, to do a better analysis of Michigan's business tax system from an economic development perspective.

In addition to tax abatements and other economic development incentives, part of what makes Michigan's tax system quite competitive when considering marginal tax rates on new branch plants are provisions that favor investment and favor export-base companies. Michigan's Single Business Tax has an investment tax credit that cuts the effective tax rate on new

investment by over one-third. In addition, the overweighting of the sales tax factor in the Single Business Tax is enormously favorable for export-base companies that sell their good or service outside the state. This overweighted sales tax factor was recently shifted from a 90% weight on sales to a 95% weight on sales. At the extreme, for a company that sells all of its goods or service outside the state, and has almost all its property and payroll in Michigan, this implies that the company's effective Single Business Tax rate is lowered by 95% from what would be paid by the same company if all its sales were in Michigan.

Third, the marginal tax rate of Michigan's business tax system can be lowered by revisions that would move the Single Business Tax back closer to its original concept, before everyone tried to "fix" it. As originally designed, the SBT included a 100% capital acquisition deduction (CAD) that essentially meant that the tax had no effect on marginal incentives to invest in Michigan. The CAD over the years was modified because of concerns that the CAD would be ruled unconstitutional for favoring Michigan investments over out-of-state investments. The Michigan SBT now includes an investment tax credit (ITC), but these credits are usually not high enough to be equivalent to the original CAD in favorable effects on investment incentives. The marginal tax rate on investment of the SBT can be lowered by restoring the CAD to its original 100% level, or by making the ITC rate the same as the SBT rate; either of these changes would avoid any marginal burden of the SBT on investment. Depending on legal advice, a restored CAD or a larger ITC could apply either only to Michigan investments or to all investments. To avoid business tax revenue losses that might require cuts in public services, which would discourage economic development, expanded SBT investment incentives could be paid for by removing some of the provisions in the SBT that complicate the system and move it away from a

true value-added concept, such as the gross receipts deduction, the excess compensation deduction, and numerous other deductions. In addition, with a CAD or ITC that eliminated or significantly reduced the marginal tax burden on business investment, it would not be as important to favor export-based businesses through Michigan's extreme overweighting of the sales factor. Removing some of these provisions would probably not only finance lower marginal tax rates on investments, but also allow a lowering of the overall SBT rate without a revenue loss.[9]

Fourth, the marginal tax rate on investments by export-based businesses can be lowered by SBT revisions that would increase the SBT credit for personal property taxes on industrial property. To avoid a large revenue loss, but still provide the same incentive for marginal business investments, this tax credit should only apply to new investments in industrial property. Ideally, this credit would be made refundable, apply to new investments in real industrial property as well as personal industrial property, and be at a rate of 100%. If all this were done, local tax abatements on new investments in industrial property would become superfluous and could be abolished, which would over time significantly increase local tax revenue. Even though manufacturing companies would then pay increased property taxes, the abolition of abatements

[9]Given that the investment tax credit under the SBT already reduces the marginal tax rate on investment by at least one-third, and that this provision costs $132 million in FY 2006 (Executive Budget Appendix on Tax Credits, Deductions, and Exemptions for Fiscal Year 2006), the total cost of lowering this marginal tax rate on investment to zero probably is less than an additional $264 million per year. The excess compensation reduction provision costs $218 million per year, and the gross receipts reduction provision costs $161 million per year. In addition, the exemption for UI, workers' compensation, and social security payments costs $151 million per year. If we ignore interaction between these SBT provisions and other SBT provisions, eliminating just these three provisions of the SBT would raise $530 million per year. In addition, Michigan Senate Fiscal Agency memos from December 14, 2005 and September 14, 2005 suggests that rolling back the sales factor overweighting raises about $24 million per 5% rollback, e.g., the state would collect $24 million more in revenue if the sales factor was reduced from 95% to 90%, and by much more with a more extensive rollback of the sales factor. Therefore, it appears likely that changes in all these SBT provisions could fully finance both expanded investment tax credits and a lower SBT rate.

would be more than made up for by these SBT refundable tax credits. The tax credits would mean that Michigan's business property tax system would impose no marginal tax burden on new investment by manufacturing businesses. Refundable credits equal in magnitude to current industrial property tax abatements could probably be funded by modifying some of the previously mentioned provisions in the SBT that move the SBT away from a value-added tax base.[10] Permanent 100% tax credits for property taxes on new property investment would probably require some additional sources of financing.

What would be the economic development impact of these suggested reforms? Unfortunately, it is difficult to estimate the impact with assurance without having some model that simulates how the population of firms in the state would be affected by these lower marginal tax rates, and how they would respond with new investment. Potentially, the impact could be quite significant, as these reforms lower the effective marginal tax rate on industrial investment from the property tax, which is more than 40 percent of overall Michigan business taxes. A proper analysis would need to create a model with a representative sample of Michigan firms, and compare how favorable the proposed tax treatment of industrial investment is under my suggested reforms, compared to the current SBT investment tax credit, credit for industrial property taxes, and local tax abatements. As I said before, I think it would be feasible to achieve significantly lower marginal tax rates on business investment without sacrificing business tax

[10]If the refundable tax credit for new investment in industrial property was limited in term and percentages in a similar manner to the current industrial property tax abatements, the long-run cost of this refundable tax credit would be similar to current property tax abatements, but the costs would be borne by the state rather than local governments. The FY 2006 estimated cost of industrial property tax abatements, according to the Executive Budget Appendix on Tax Credits, Deductions, and Exemptions, is $330 million. In the short-run, a refundable tax credit for industrial property through the SBT would have much lower costs, as it would only apply each year to the incremental new investment that year.

revenue, if the Legislature and Governor are willing to substantially limit various deductions in the SBT.

Let me briefly consider other suggested reforms to Michigan's business tax system.

SBT abolition, proposed by, among others, Oakland County Executive Brooks Patterson, and implicit in current law after 2009. The problem from this proposal, assuming that there is no offset by increases in other taxes, is the loss of revenue, and the resulting likely loss in public service quality. I believe that the economic development research literature suggests the likely loss in public service quality would have a good chance of more than offsetting the incentive effects of SBT abolition, so that abolition of the SBT could actually harm the state's economic development. Furthermore, abolition of the SBT is not needed for Michigan to have good incentives for economic development, as we can have an SBT that raises significant revenue, yet has low or even zero marginal tax rates on capital investment by export-base businesses.

SBT replacement by a gross receipts tax, as proposed by the Detroit Chamber of Commerce (Detroit Chamber, 2004). A gross receipts tax suffers from the problem of pyramiding taxes, as a firm and its suppliers will both pay taxes on their gross receipts. This tax structure encourages vertical integration of businesses, in which businesses in the supply chain buy each other to reduce their total tax burden. Also, a simple gross receipts tax does tax marginal business investment. This could be fixed, but only with a revenue loss or a higher gross receipts rate to offset the revenue loss.

Michigan personal income tax abolition, as recently proposed by David Littmann (senior economist at the Mackinac Center) before this subcommittee. Although there is research evidence that higher state and local business taxes have modest negative effects on state

economic development, there is not strong research evidence that personal income taxes, at least at the modest rates that states typically impose, have significant negative effects on state economic development. Therefore, I do not think there is a significant research consensus that abolishing a state's personal income tax would significantly improve a state's economic development. The resulting effects on public services, which also affect economic development, would also need to be considered.

A so-called FairTax, as proposed for the nation by a national coalition, and for Michigan by, among others, Michigan Representative Fulton Sheen, the chairman of this committee. The FairTax proposal is essentially a universal sales tax applied to all goods and services, with a rebate for the poor, as a replacement for all other personal and business taxes. I am sympathetic to the general concept of tax base broadening and lowering rates, particularly in state tax systems, which by their nature are limited in their ability to significantly redistribute income because of personal and business mobility. However, research suggests that the rate required for a broad sales tax to replace other taxes is much higher than estimated by FairTax proponents. At the national level, the research of William Gale (Co-Director of the Urban Institute-Brookings Institution Tax Policy Center) suggests that the revenue-neutral national FairTax rate is much higher than the 23% rate claimed by FairTax proponents, and under plausible assumptions could be greater than a 45% sales tax rate (Gale, 2005). The basic problems leading to higher estimates of a revenue-neutral FairTax rate include: (1) whether it is really politically plausible that government will impose a tax on sensitive consumption items such as housing, health care, food, and credit card interest; (2) allowing for realistic amounts of tax evasion; (3) correcting for changes in the gap between producer prices and consumer prices. Similar arguments suggest that

the FairTax proposed for Michigan of 8.58% would not raise enough revenue to fully replace the revenue from the taxes the Michigan FairTax is supposed to supplant (the state income tax, the current state sales tax, the personal property tax, and the SBT). I agree that Michigan should consider broadening the base of the sales tax, but we should be realistic about what revenue gains are actually feasible from such base broadening.

Wolfram's proposals for SBT reform. Dr. Gary Wolfram (Professor of Economics, Hillsdale College) has proposed an SBT reform package that includes some of the investment incentives I support for the SBT, but also suggest that businesses be permitted to choose between the value-added tax base and the profits tax base (Wolfram, 2005). I think this would result in more volatile business tax revenues, as businesses would opt for the profits tax base during recessionary low-profit years. Professor Wolfram mentions the possibility of forcing businesses to choose which base to use for a number of years; this would still increase the volatility of business tax revenues, as some businesses would be free to switch in any given year, and to the extent to which businesses choose the profits tax base, the profits tax base is more volatile than the value-added tax base. In addition, I have some technical concerns about whether the subtraction method value-added tax that Professor Wolfram proposes is feasible for a state, which unlike a country does not control shipments of goods or services over all its borders. The current SBT is an addition method value-added tax – the tax is calculated by adding various components to profits – and we know such a tax is feasible for a state to implement.

In conclusion, state and local business taxes have modest effects on economic development that deserve consideration by state policymakers, but these modest effects should not be exaggerated. State economic development is not only affected by business taxes, but also

by many other factors, for example public services and the quality of labor. Michigan's business taxes are far more competitive with other states than commonly understood, as measured both by the average impact of state and local taxes on businesses, and by the impact of state and local taxes on marginal incentives for business investment by export-base businesses. Tax reforms could further lower Michigan's marginal tax rates on business investment by export-base businesses, without a significant net loss in tax revenue if some other business tax provisions are simultaneously modified. Such reforms would promote state economic development without costing significant state revenue. Preserving the state's revenue helps maintain public services that are also needed to promote state economic development.

Table 1. Michigan's Overall State/Local Business Tax Rate, Compared to the U.S. Average and Nearby States

State	State & Local Business Taxes, as Percent of Private Gross State Product
Michigan	4.3%
U.S. Average, All States	4.7%
Indiana	4.3%
Ohio	4.5%
Illinois	4.8%
Wisconsin	4.5%

NOTES: Figures come from Table 4 in Ernst and Young (2005), and are calculated for fiscal year 2004.

Table 2. States Ranked by Percentage Employment Growth Since March 2001 Business Cycle Peak, Compared With Overall State & Local Business Tax Rate

State	Pct Change in Total Non-farm Employment, Mar 2001 to Dec 2005	State & Local Business Taxes as % of Private Gross State Product
Nevada	18.9	4.5
Arizona	10.9	4.7
Florida	9.4	5.0
Montana	9	5.4
Idaho	8.4	4.2
Wyoming	8.1	9.1
New Mexico	7.8	5.9
Utah	7.3	3.7
North Dakota	4.2	6.2
Maryland	4.1	4.4
Oregon	3.9	3.7
Virginia	3.7	3.6
South Dakota	3	5.3
Washington	3	5.7
Rhode Island	2.8	5.0
Vermont	2.7	5.0
Delaware	2.5	3.5
Nebraska	2.1	5.2
New Jersey	1.8	4.3
Arkansas	1.6	4.2
New Hampshire	1.6	5.1
Maine	1.5	5.8
U.S.	1.4	4.7
Texas	1.4	5.8
Iowa	1.1	4.4
California	1	4.5
West Virginia	0.9	6.5
South Carolina	0.8	4.3
Minnesota	0.8	4.5
Alabama	0.7	4.0
Tennessee	0.7	4.5
Wisconsin	0.6	4.5
Kentucky	0.5	4.2
Kansas	0.3	5.3
Pennsylvania	0.2	4.5
Colorado	-0.2	3.8

Table 2. (Continued)

State	Pct Change in Total Non-farm Employment, Mar 2001 to Dec 2005	State & Local Business Taxes as % of Private Gross State Product
Indiana	-0.2	4.3
Georgia	-0.3	3.8
Oklahoma	-0.3	5.4
Connecticut	-0.4	3.8
Missouri	-0.6	3.8
North Carolina	-0.9	3.5
New York	-1.4	5.7
Illinois	-2.8	4.8
Mississippi	-2.8	5.7
Ohio	-3.1	4.5
Massachusetts	-4.8	3.9
Michigan	-5.1	4.3
Louisiana	-10.6	6.0

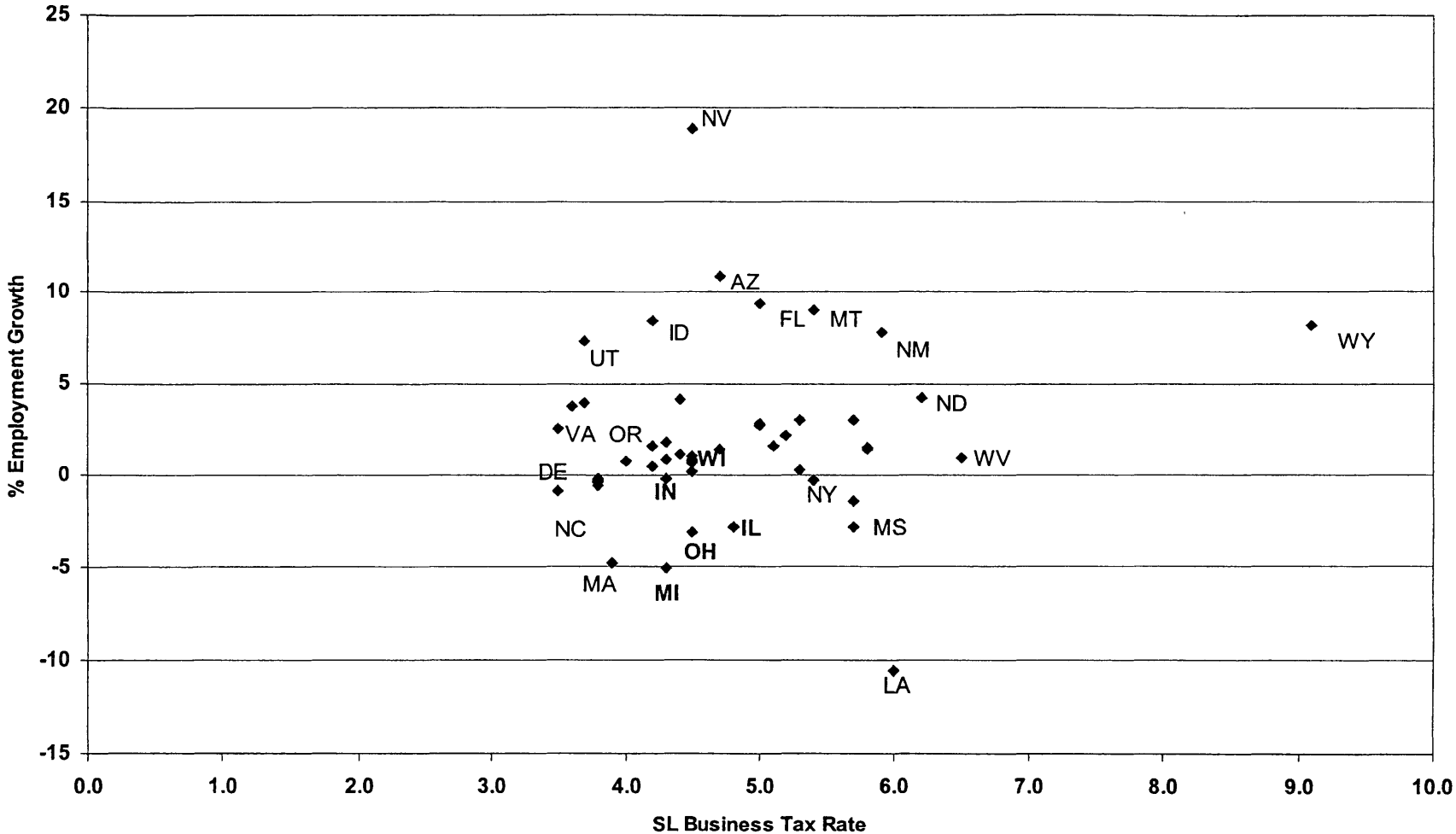
NOTES: Percentage employment growth uses seasonably adjusted figures for non-farm employment growth, downloaded by author from website of U.S. Bureau of Labor Statistics. State and local business tax rate comes from Table 4 of Ernst and Young (2005), and are figures for FY 2004. U.S. employment growth and tax burden are averages that include Alaska, Hawaii, and the District of Columbia.

Table 3. Effects of Economic Development Incentives on Effective State and Local Business Tax Rates, Michigan and Nearby States

State	Effective State and Local Business Tax Rate without Incentives (% Reduction in Rate of Return)	% Reduction in State and Local Taxes Due to Normal Incentives	% Reduction after Discretionary Incentives Such as MEGA	% Reduction after State and Local Enterprise Zone Incentives
Michigan	11.3	27.7	63.6	85.0
Indiana	20.5	20.0		57.1
Ohio	15.0	22.6	28.1	48.8
Illinois	8.6	6.8		25.6
Wisconsin	9.3	0		31.7

NOTES: This table is a reproduction of Table 14.2 in Bartik, Eisinger, and Erickcek (2003). These tables are derived by simulations of the Tax and Incentive Model (TAIM) developed and maintained by Peter Fisher and Alan Peters of the University of Iowa. Fisher and Peters (1998) describe the model in detail. The model is a hypothetical firm model. State and local taxes and incentives are defined as of 1998 in the current version of the model. The results here are based on results for 16 manufacturing industries at the two-digit level (SICs 20, 23-28, 30-38). The average results reported here are aggregated using GDP shares of each industry in Michigan in 1999. The effective state and local business tax rate is defined as the percentage reduction in the internal rate of return in a project located in the state, compared to locating the same project in a hypothetical state that has no state or local taxes. For example, a reduction from a 10% return to an 8% return is a 20% effective tax rate. The percentage reduction in state and local taxes is simply the reduction in taxes with the incentive in question, compared to if there were no incentives, divided by the taxes if there were no incentives, and multiplied by 100. Both the discretionary calculations and the enterprise zone calculations also assume all the normal incentives are applied, but the enterprise zone calculations assume that discretionary incentives such as MEGA are also not applied. Michigan and Ohio are the only ones of these states that have truly discretionary incentives.

Figure 1. Scattergram Showing Percentage Employment Growth for Each State Since Business Cycle Peak in March 2001, and Overall State and Local Business Tax Rate in Each State in FY 2004



Notes: This figure simply reports the data from Table 2. Each data marker is one state. To avoid cluttering the figure, I have only labeled selected states.

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