

## Designing State–Local Fiscal Policy for Growth and Development

*Fifth in a series of workshops to be held at the Federal Reserve Bank of Chicago.*

The impact of state and local fiscal policy on the performance and prospects of the Midwest economy was the focus of the fifth workshop in the Bank's year-long assessment of the Midwest economy. The workshop, held July 17, 1996, highlighted key tax and spending issues facing state and local governments in their attempts to foster economic growth.

The morning sessions reviewed the current condition of state and local governments in the Midwest and examined how much state policies matter in influencing economic growth and business location decisions, particularly relating to the use of tax policy to promote growth in the economy. The luncheon address turned to the broader issue of how policymakers should assess the success of an economic development policy. Traditionally, job gains or losses have been the favorite measure, but luncheon speaker Paul Courant, chairman of the economics department of the University of Michigan, questioned whether this was the best approach available.

The afternoon sessions began with a debate on the use of selective tax abatements to attract economic development. Should states be prohibited from offering selective tax breaks or can these incentives produce economic and social benefits that would not occur without the incentives? The final session addressed proposals to restructure state–local tax systems more broadly for growth and development—in particular, aligning business taxation with benefits received by business from government. A concluding presentation expanded on the benefits or expenditure side of fiscal policy by examining the condition and level of investment in highways, one key aspect of the region's infrastructure.

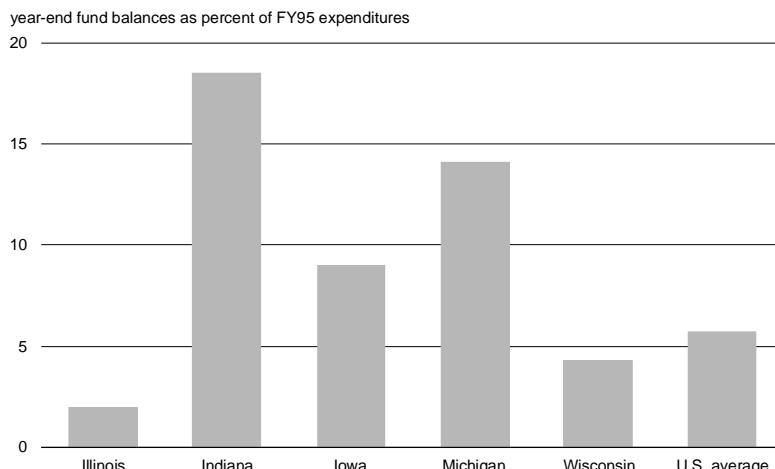
## Introduction

In his opening remarks, William Testa, assistant vice president at the Federal Reserve Bank of Chicago and director of the Assessing the Midwest Economy project, noted that the 1990s have seen a remarkable turnaround in the economic fortunes of the region's economy. This relative prosperity is evident in the state and local sector; Midwestern state and local governments have, in general, rebuilt their budget balances and improved their fiscal position. Part of the reason for examining this sector of the economy is to suggest ways in which the region's governments can capitalize on their advantages. The Midwest's strong fiscal position can be used to promote measures that enhance growth and to correct policy problems. In today's environment of federal devolution of responsibility to the states, the role of state and local governments has become all the more important. As the numerous policy experiments underway throughout the District attest, success does not appear to have made the region's governments complacent.

*The fiscal experience of the District states shows the same break with the past that has characterized the economic performance of the region overall.*

The first presentation of the workshop was by Richard Mattoon, senior economist at the Federal Reserve Bank of Chicago. Mattoon provided evidence as to the recovery of the state and local government sector in the five states of the Seventh Federal Reserve District—Illinois, Indiana, Iowa, Michigan, and Wisconsin. Mattoon highlighted two themes in the behavior of the state and local sector. First, the fiscal experience of the District states shows the same break with the past that has characterized the economic performance of the region overall. Unlike previous recessions, the national recession of 1990-91 had a relatively shallow impact on the Midwest's economy and fiscal condition. The District's governments managed to weather the recession by making small tax adjustments and expenditure corrections. Previous recessions had usually forced dramatic tax increases and program cutbacks by District governments. Additionally, recovery for the District states has been somewhat more robust than for the U.S. as a whole; this is reflected in the FY 1995 budget balances for the District states (figure 1). Michigan's performance has been particularly impressive—beginning the decade with a budget deficit of more than \$1 billion, the state now has a surplus of nearly \$2 billion.

**Figure 1** 1995 Budget Balances



Source: Richard Mattoon, "An Overview of Midwest Tax Climate and Fiscal Position," presentation prepared for the workshop "Designing State-Local Fiscal Policy for Growth and Development," held at the Federal Reserve Bank of Chicago, July 17, 1996.

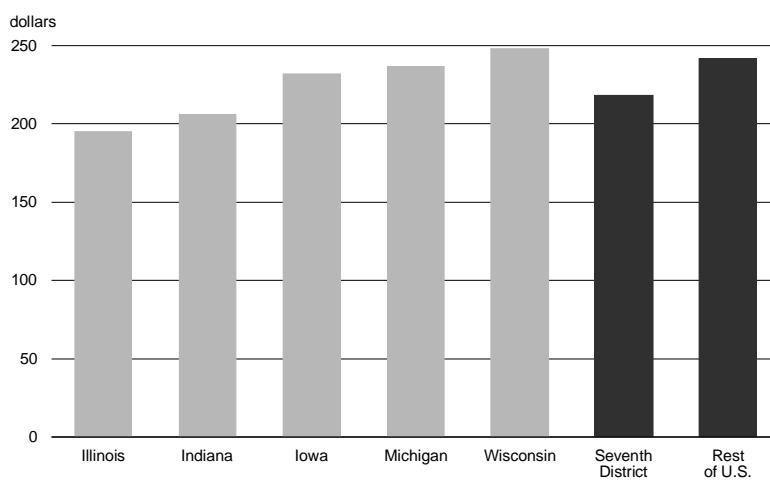
*Many District states have been at the forefront of policy experiments that have received national attention—for example, Wisconsin’s proposed welfare reform measures and Michigan’s dramatic restructuring of its state and local tax structure related to reform of school funding.*

*Current fiscal conditions in the state and local sector in the District states range from among the best in the country, in the cases of Michigan and Indiana, to stable and improving, in the case of Illinois.*

The second theme suggested by Mattoon was the innovative behavior of the District governments. Rather than becoming complacent during this period of relative fiscal health, many District states have been at the forefront of policy experiments that have received national attention—for example, Wisconsin’s proposed welfare reform measures and Michigan’s dramatic restructuring of its state and local tax structure related to reform of school funding.

In addition to strong revenue growth, Mattoon attributed the fiscal good health of the District states to their relative thrift. District governments’ spending is below the average for the rest of the U.S. across a number of categories—for example, total spending (figure 2), corrections spending, administrative spending, and state and local debt costs. District expenditure levels tend to be above the average for the rest of the U.S. in areas often viewed as beneficial to state economies, such as education and highway expenditures. District states tend to have tax rates that are about average, although reliance on the property tax as a revenue source has historically been above average.

**Figure 2** Spending per \$1,000 Personal Income, 1992  
(Total State–Local Spending)



Source: See figure 1.

Furthermore, Mattoon noted that the flow of federal funds indicates that Washington provides less help to District states than to other regions. In 1995, per capita federal expenditures in the region as a percentage of the U.S. national average ranged from a high of just over 90% in Iowa to under 80% in Wisconsin. Mattoon concluded by suggesting that current fiscal conditions in the state and local sector in the District states range from among the best in the country, in the cases of Michigan and Indiana, to stable and improving, in the case of Illinois.

*States and possibly localities can act in two policy arenas: (1) stabilization policy to offset short-term episodes of excess state unemployment and (2) growth policy to influence long-term output and employment.*

## Do State Policies Matter?

William F. Fox of the economics department at the University of Tennessee presented an overview of regional fiscal policies and issues. He noted that states and possibly localities can act in two policy arenas: (1) stabilization policy to offset short-term episodes of excess state unemployment and (2) growth policy to influence long-term output and employment.

Beginning with stabilization policy, Fox noted that analysts continue to debate how states respond to business downturns. The *perverse* hypothesis, which suggested that state tax and spending behavior acted to magnify cyclical swings in the economy, held sway for a while. More recently, several studies have arrived at conflicting conclusions, raising the question whether state and local governments should use stabilization policies.

First, Fox presented some evidence that state economic trends are sufficiently diverse to suggest that states could sometimes benefit from varying economic stimulus. According to one measure, employment growth between 1982 and 1989 ranged from a low of -1.7% in Wyoming to a high of 5.1% in Arizona. The range was nearly as wide between 1990 and 1994. Correlations in employment growth rates in individual states across time also vary widely.

Next, Fox discussed the long-accepted view of Wallace Oates and Richard Musgrave that state-initiated fiscal policy is ineffective and undesirable, because there may be coordination problems among states; stabilizing actions by individual states may be contradictory or over-stimulative; and stabilizing policies may conflict with national policies, such as those relating to inflation and trade. Fox added that *multipliers* are low, that is, efforts to boost any particular state's income during a downturn would quickly become ineffectual as income leaked into neighboring states. Similarly, factor flows such as migration of workers could offset stabilization policy or make necessary adjustments to the economy before the state government could implement an appropriate stabilizing measure. Furthermore, at the state level, debt issuance imposes an offsetting burden on residents because such debt must be financed externally, thereby reducing the permanent income of those state residents being asked to bolster state spending.

Citing recent statistical studies, Fox made the case that, contrary to the traditional view described above, state or regional fiscal policy may be useful. For example, a recent study by Ed Gramlich of the University of Michigan finds that state multipliers are larger than previously thought. With regard to the external debt question, the counter-argument is that national debt may *also* tend to be externally financed, thereby making state fiscal policies as powerful as national ones.

In the ensuing discussion, conference participants took issue with several strands of Fox's reconsideration of state fiscal policy. The main objection centered on the most appropriate mechanism through which regions should adjust to economic shocks. Migration of factors of production, especially workers, may be preferable in terms of timing; state governments might respond too slowly and, thereby, erroneously to transitory economic shocks. More importantly, the question was raised as to how a state government could correctly distinguish, for example, a temporary downturn from a change in a region's long-run trend? Courant noted that the last business cycle looked very different in the Midwest than in the rest of the country, and it looked very different in the Midwest from the downturn that preceded it. If the state government guesses incorrectly, debt issuance in response to a downturn could further erode the region's prospects and further burden immobile residents who are experiencing loss of income.

*Difficult questions remain about the overall efficacy of state-local growth programs and policies. Do the benefits of such programs justify the overall costs?*

*To begin to answer these important questions, we might first determine whether state policies matter to the location of economic activity.*

*Thomas Holmes of the University of Minnesota addressed this problem by examining the density and growth of manufacturing activity along state borders.*

Among the practical problems that state and local governments face in trying to use stabilization policies are their own requirements to balance budgets annually, although many governments avoid these rules by delaying or accelerating payments and receipts and building up positive fund balances. Similarly, state unemployment insurance contributions can be delayed or explicit borrowing can take place. In addition, state and local governments can adopt tax and revenue structures that are more or less sensitive to economic conditions. Rainy day funds are another tool that state governments can use, although such funds are relatively small and have been largely used to smooth out state budgets and government spending rather than state economic conditions. Workshop participants argued that current state tax, spending, and debt behavior are nowhere close to the levels that would be required for state intervention to exert a significant economic impact.

Turning to growth policy, Fox noted that there exists a vast breadth of state policies aimed at boosting economic growth trends. Growth-enhancing policies can include the provision of staple government services, such as education, roads, libraries, and amenities. More explicit growth policies include tax structure, productivity-enhancing programs such as technology transfer and small business assistance programs, and selective tax abatements and infrastructure improvements targeted toward specific firms or industries. Fox noted that research findings suggest that state policies measurably affect economic and social activities, such as small business start-ups, income growth, job growth, and business location decisions. Quite often, however, the effects of state-local activities tend to be small and highly uncertain. Thus, difficult questions remain about the overall efficacy of state-local growth programs and policies. Do the benefits of such programs justify the overall costs? How much do such policies distort or diminish the economic growth which would have otherwise taken place? Are the effects short-lived? Do these policies have offsetting effects that prevent us from drawing any conclusions about local or national welfare gains? Some politically motivated local growth policies may ultimately be self-defeating or destructive.

To begin to answer these important questions, we might first determine whether state policies matter to the location of economic activity. If not, other questions may be moot. The remainder of this workshop session examined statistical approaches that shed more light on this issue. It is difficult for even the most careful statistical studies to discern the influence of state policies on growth and development. State policies differ in various and subtle ways, while there are a multitude of confounding factors, such as work force characteristics, wages, transportation access, access to markets, climate, public infrastructure, and previous development.

Thomas Holmes of the University of Minnesota addressed this problem by examining the density and growth of manufacturing activity along state borders. If a large and representative sample of border locales can be compared, all other variable locational factors should become neutralized, bringing any effects of state policies to the fore. State tax differences were rejected by Holmes as a subject for study because states may allow statewide taxes to be abated near their borders to avoid deleterious effects on business activity. Instead, Holmes examined state borders that differ according to whether the state has passed a *right-to-work* law. These laws make it illegal for someone to be forced to join a union as a condition of employment by a firm and are clearly interpreted as pro-business.

Some have argued that the dramatic shift in manufacturing activity to states in the Southeast and other regions outside the traditional manufacturing belt since the 1950s has been partly driven by anti-union sentiment. From 1947 to 1992, manufacturing employment increased by 148% in states that currently have right-to-work laws and was virtually flat elsewhere. As the map shows (figure 3), there has been a clear regional tendency to eschew right-to-work laws in the Northeast and Great Lakes states, while states in the Rocky Mountains, Plains, and South have tended to adopt such laws.

**Figure 3** Geography of Right-to-Work Laws



Source: Thomas J. Holmes, "The Effects of State Policies on the Location of Industry: Evidence from State Borders," FRB Minneapolis, research department staff report, No. 205, December 1995, appendix, figure 1.

In designing his experiment, Holmes examined a stretch of state borders over 4,000 miles long, with 17 pairs of combinations of adjacent states. The study area runs south from the Minnesota border, down and around Oklahoma, and eastward to the Atlantic ocean between those states with and those states without right-to-work laws. Counties were the units of analysis, and the analysis ran four county layers deep along the experimental border areas. This allowed Holmes to examine discontinuities in economic activity as distance from the border varies.

The most dramatic and statistically significant differences were found across state borders (table 1). To account for differing size of counties, manufacturing employment was measured against size of population and size of total employment. The results for 1992 indicate dramatic differences in manufacturing employment intensity along the border. Less conclusive evidence lies in the pattern in counties running away from the border. On the *anti-business* (no right-to-work law) side, manufacturing employment tends to tail off nearer the border where, presumably, a short movement across the state border would improve business conditions. On the pro-business side, there is some tendency for the state's manufacturing employment to cluster near the border.

Next, Bill Lilley presented his joint work with Laurence DeFranco, both of InContext Inc., on the impact of retail taxes on the Illinois–Indiana border. Retail and excise tax differences are particularly acute along this border in favor of the Indiana side (table 2). Surveys conducted by the authors in five Midwestern states suggest that excise tax-sensitive retail establishments are especially labor intensive. They have done similar work using data from the New England states, the New York metropolitan area, the Oregon area, and others.

In places with a large price differential caused by differing excise tax rates across borders, the authors found large differences in employment and job creation. Initially, there is a clustering of smaller retail sales firms that are sensitive to the excise tax differentials across state borders. These include small firms that specialize in retail sales of tobacco, alcohol, food, and gasoline. Once the momentum has been started by these smaller firms, larger retail firms, such as WalMart, follow. Increasingly footloose, the retail industry might be among the first to move across state borders to a friendlier tax environment. The areas

*Increasingly footloose, the retail industry might be among the first to move across state borders to a friendlier tax environment.*

**Table 1** Normalized Manufacturing Employment—Unweighted Means across Counties by Distance from Border and Side of Border

Side of border	Miles from border	1992 (% of total employment)	1992 (% of population)	1947 (% of population)	1947-92 growth rate (weighted mean)
Anti-Business	75 - 100	25.9	6.5	5.3	42
	50 - 75	23.1	5.9	4.4	28
	25 - 50	23.1	5.6	3.0	16
	0 - 25	21.0	5.1	2.9	54
Pro-Business	0 - 25	28.6	7.5	3.2	170
	25 - 50	26.7	7.1	3.3	128
	50 - 75	26.7	7.4	3.7	133
	75 - 100	25.4	6.7	3.2	139

Source: Thomas J. Holmes, "The Effects of State Policies on the Location of Industry: Evidence from State Borders," FRB Minneapolis, research department staff report, No. 205, December 1995, appendix, table 2.

**Table 2** Indiana vs. Illinois General Sales Taxes and Special Excise Taxes

	General Sales tax	Cigarettes (per pack)	Gas (per gallon)	Alcohol (per gallon)	Beer (per gallon)	Wine (per gallon)
Indiana	5.0%	15.5¢	15.0¢	\$2.68	11.5¢	47.0¢
Illinois	6.75	4.0	19.0	2.50	7.0	23.0
Cook/Chicago	2.5	26.0	20.5		6.0	
Illinois near Border	9.25	70.0	39.5	2.50	13.0	23.0

Source: William Lilley, "Impacts of Retail Taxes on the Illinois-Indiana Border," presentation prepared for the workshop "Designing State-Local Fiscal Policy for Growth and Development," held at the Federal Reserve Bank of Chicago, July 17, 1996.

of sensitivity typically found by the authors were a three mile zone in the lower excise tax state and a 12 mile zone in the higher excise tax state. (In Illinois, the authors reported a larger, 15 mile, zone of sensitivity.)

One question that this raises is whether the response of retail firms spills over and attracts other types of firms and whether there is a discernible effect on personal wealth in affected areas.

Typically, areas with a higher concentration of retail sales firms are thought to be more poorly situated than other areas. Lilley and DeFranco believe that this is contradicted by the higher household income found inside the Indiana border with Illinois, where the excise tax differential is significant.

The authors displayed their analysis using detailed maps of employment density by industry for zip code areas on both sides of state borders. They believe that this type of presentation is effective in communicating their findings to state and local policymakers. Apparently, state policymakers have come to believe that retail tax differences can influence economic activity along their borders. High-tax states have established buffer strips of low tax rates—or are considering such buffer strips—along their borders to mitigate any potential loss of business. Examples include the Vermont and Massachusetts borders along New Hampshire, the New Jersey border along Delaware, and the Texas/Arkansas border.

*State policymakers have come to believe that retail tax differences can influence economic activity along their borders. High-tax states have established buffer strips of low tax rates along their borders to mitigate any potential loss of business.*

*What are the appropriate components of business tax costs; how do taxes influence location; and what would be the effect on subnational government finances and the taxation of capital income of a replacement federal consumption-based flat tax?*

A second criticism of statistical studies purporting to show that taxation influences the level and location of business activity has been that individual businesses differ widely in their sensitivity to state and local taxation. Moreover, the general indicators of subnational tax differentials that are often used to characterize a state's business tax climate, such as average tax rates and average tax collections per capita or as a percentage of personal income, are virtually useless in understanding the firm's investment location decisions. For these reason, James Papke of Purdue University has developed a computerized microanalytic model, called AFTAX, to simulate the investment decision process for representative or actual firms at specific locations. The underlying rationale of the model is that capital investment is attracted to activities and locations where it earns the highest after-tax returns. The simulation results are applied to empirical studies testing for positive correlations between investment levels and after-tax returns. Papke presented work based on two studies that he recently undertook for the U.S. Small Business Administration (SBA). The first examines the inter-state comparative tax burdens on an incremental capital investment and the quantitative impact of investment tax incentives on post-tax rates of return in the six Great Lakes States that comprise the fifth District of the SBA—Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. The study focused on the implications for state and local tax policy of tax-induced interstate competition for capital investment. In terms of tax levels and investment tax incentives, the study addressed how to measure interstate tax-cost differentials and tax impact and how these tax burdens compared, state by state. The issue of intergovernmental tax-cost differentials raised the following questions: What are the appropriate components of business tax costs; how do taxes influence location; and what would be the effect on sub-national government finances and the taxation of capital income of a replacement federal consumption-based flat tax?

Papke indicated that commonly used measures of comparative business tax burdens provide few relevant insights for policy purposes because the tax burdens of individual firms vary by capital asset composition, operating characteristics, and organizational type and because of the complex and interdependent web of multilevel government tax provisions that apply to firms at different locations. Given firm-specific characteristics and site-specific tax parameters, a meaningful measure of comparative business tax burden based on the after-tax profits on an incremental investment is calculated. The AFTAX model examines the specific impact of subnational business taxation on firms and industries by applying the federal and relevant state-local tax structures to the firm's unique operating characteristics. The output of the model is an estimate of how the profitability of a new investment is affected by the state-local tax system. Whether business taxes influence investment levels and location depends on the relative magnitude of the tax-cost differentials for specific types of firms, especially those in *footloose* businesses. With the AFTAX model, industries and firms that are particularly sensitive to tax-level differentials and specific tax provisions can be identified. Another advantage of the AFTAX model over the use of the general measures of comparative taxation is that it allows the user to calculate site-specific property taxes, rather than employing statewide average tax rates. Given the large magnitude of the property tax relative to other state and local taxes paid by businesses and the wide intrastate variations in property tax rates, site-specific property tax liabilities are particularly important in evaluating relative tax burdens within a state. The AFTAX model also converts after-tax returns into effective marginal tax rates on incremental investment. The effective marginal tax rate is the percentage by which taxation reduces the rate of return on investment; other things being equal, the higher the effective marginal tax rate, the worse the investment climate.

*The states that tax one type of firm heavily tend to tax all sectors heavily. Indiana consistently has the lowest rate of return on new capital investment, while Michigan and Minnesota have the highest.*

Papke's studies suggest that the difference in the after-tax rate of return in the Great Lakes states is relatively small, amounting to at most 7% (see table 3). This implies a comparatively level tax playing field among the different types of industries in these states. The states that tax one type of firm heavily tend to tax all sectors heavily. Indiana consistently has the lowest rate of return on new capital investment, while Michigan and Minnesota have the highest, even though they are commonly perceived as being high tax states. Papke found little evidence for the perception that general subnational business tax burdens differed significantly within and among the six states. With the after-tax profits roughly equal across the six states, taxation can be considered effectively neutralized in investment location and business development decisions.

**Table 3** Comparative After-Tax Rates of Return (ATRR) on New Investment by State and Industry

Industry	SIC Code	Illinois (1)	Indiana (2)	Michigan (3)	Minnesota (4)	Ohio (5)	Wisconsin (6)	Region Mean (7)	Stdv (8)
Manufacturing									
• Food and kindred products	20	12.150	11.925	12.551	12.452	12.301	12.026	12.234	0.244
• Apparel and other textile products	23	12.136	11.644	12.502	12.483	12.012	12.013	12.132	0.325
• Lumber and wood products	24	12.216	11.900	12.395	12.257	12.242	12.034	12.174	0.177
• Furniture and fixtures	25	12.218	11.785	12.513	12.407	12.146	12.063	12.189	0.258
• Printing and publishing	27	12.155	11.976	12.555	12.437	12.357	12.028	12.251	0.233
• Chemicals and allied products	28	12.160	11.933	12.571	12.492	12.305	12.047	12.251	0.251
• Fabricated metal products	34	12.188	11.904	12.425	12.493	12.277	12.064	12.225	0.221
• Machinery, except electrical	35	12.189	11.905	12.413	12.514	12.268	12.071	12.227	0.223
• Electrical and electronic equipment	36	12.310	11.964	12.492	12.797	12.306	12.228	12.349	0.278
• Motor vehicles and equipment	37	12.355	11.856	12.501	12.649	12.177	12.224	12.294	0.277
• Instruments and related products	38	12.136	11.847	12.549	12.441	12.221	12.010	12.200	0.263
Transportation, Communication, & Public Utilities									
• Communication	48	12.283	12.067	12.490	12.354	12.399	12.116	12.285	0.165
Retail									
• General Merchandise Stores	53	12.173	11.660	12.687	12.461	12.015	12.043	12.173	0.361
Services									
• Business services	73	12.299	12.084	12.669	12.759	12.450	12.214	12.413	0.264
Mean		12.256	11.895	12.556	12.528	12.249	12.123	12.268	
Standard Deviation		0.090	0.147	0.091	0.163	0.142	0.098		

Note: New investment undertaken at homesite. For detailed description of the sites, tax systems, and firm sizes included in the baseline simulations, see Papke (1995).

Source: James Papke, "Interjurisdictional Business Tax-Cost Differentials: Convergence, Divergence and Significance," reprint series, No. 915, Center for Tax Policy Studies, Purdue University, 1995, p. 1703.

*The federal tax replacement would create a potential boom in plant and equipment expenditures.*

Papke finds that differentials in tax burdens are largely determined by firm-specific operating characteristics, such as the composition of capital assets (machinery, equipment, structures, inventories, and the like), the location of plant facilities, and the spatial distribution of product sales. Accordingly, nontargeted general tax incentives are likely to have little impact on the after-tax rates of return on prospective investments. Moreover, the effect that a lower after-tax rate of return might have on economic activity is not obvious. As table 4 shows, while Indiana ranked last in terms of after-tax profits among the Great Lakes states, it ranked first in all three measures of economic growth. Targeted incentives that are tailored to firm-specific operating requirements can, however, influence investment location decisions.

**Table 4** Comparative After-Tax Rates of Return (ATRR) with Alternative Measures of Economy Growth Rates (in percent)

	<b>Illinois</b>	<b>Indiana</b>	<b>Michigan</b>	<b>Minnesota</b>	<b>Ohio</b>	<b>Wisconsin</b>
Average Annual Growth of Per Capita GSP in constant dollars (1982-1992)	6.06 (3)	6.33 (1)	6.00 (4)	6.24 (2)	5.81 (5)	5.78 (6)
Average Annual Growth of Nonfarm Employment (1982-1992)	1.73 (6)	2.68 (1)	2.46 (4)	2.68 (2)	1.93 (5)	2.66 (3)
Average annual Growth of Per Capita Personal Income in current dollars (1982-1992)	5.85 (4)	6.00 (1)	5.93 (2)	5.92 (3)	5.67 (5)	5.61 (6)
All-Industry After-Tax Rate of Return (1995)	12.26 (3)	11.90 (6)	12.56 (1)	12.53 (2)	12.25 (4)	12.12 (5)

Note: Rank order appears in parentheses.

GSP data from U.S. Department of Commerce, Bureau of Economic Analysis, 1982-1992. Employment data from U.S. Department of Commerce, Bureau of the Census, *County Business Patterns*, selected years.

Source: James Papke, "Interjurisdictional Business Tax-Cost Differentials: Convergence, Divergence and Significance," reprint series, No. 915, Center for Tax Policy Studies, Purdue University, 1995, p. 1710.

*The elimination of the leveling effect of the current federal tax offset (deductibility) provision would result in significant increases in the cross-state differentials in effective marginal tax rates.*

The second study Papke conducted for the SBA focused on the effects of a replacement federal consumption-based tax on comparative business tax burdens in the same states. Under several current proposals for replacement consumption-based taxation, state and local business taxes are not allowable deductions from the federal tax base and all capital investment expenditures are treated as current outlays. Full and immediate deduction of capital expenditures means that capital income and the normal return to new investment would effectively be taxed at a zero tax rate. The federal tax replacement would create a potential boom in plant and equipment expenditures by reducing the estimated total effective marginal tax rate (federal, state, and local) on corporations from 38% to 8%. The ultimate result would depend on savings, productivity, and production capacity. (Small businesses would be lesser beneficiaries under the replacement tax since they are favored under the current system of progressive tax rates and expensing of the first \$17,500 of equipment purchases.) The heterogeneity of subnational business tax structures and the elimination of the leveling effect of the current federal tax offset (deductibility) provision result in significant increases in the cross-state differentials in effective marginal tax rates on new investment. According to Papke, this would heat up the tax-bidding war between the states and drive subnational taxation of capital investment to the lowest common denominator, possibly zero. Allocating capital resources in response to geographical tax-cost differentials

*Firms do want a tax structure that is competitive with those of other states but, given the trend toward competitive convergence in state tax rates, it is harder for states to offer significantly more attractive tax structures than their peers.*

*The importance of an available skilled work force has continued to increase as changes in firm production have made labor force issues paramount.*

instead of to real differences in profitability would also generate general welfare (i.e., efficiency) losses. It would also force significant revisions in the revenue mix and requirements of state and local governments. A consumption-based federal tax would effectively end state and local taxation as we know it.

Papke concluded that there appears to be implicit coordination among the Great Lakes states in business tax policy; the forces of competition or copycat behavior have tended to equalize levels of taxation. Similar data from states in other regions are being explored to see if this equalization phenomenon is national in scope. Papke suggested that, given the relative convergence in tax burden among the Great Lakes states, there is currently little need for federal intervention to correct abusive and tax-induced competition for investment. Policymakers should be aware, however, that in the presence of capital-mobility interdependencies, cooperative strategies are efficient and improved results can be achieved for all parties through coordination of business tax policies.

Bob Ady of PHH Fantus presented a view from industry. PHH Fantus has been helping firms in their location decisions for approximately 70 years. According to Ady, actual site location decisions are made by a process of elimination. There are three key issues that firms focus on when making a location decision: operating costs, operating conditions, and living conditions. These factors are related to the cost structure of the firm and reflect the relative importance of different categories of costs. For example, in manufacturing, taxes account for at most 4% of operating costs; labor costs account for 36%; occupancy, 8%; transportation, 35%; and utilities, 17%. In the service sector, on average, taxes account for approximately 5% of operating costs; labor accounts for 72%; occupancy, 15%; and utilities, 8%.

This cost breakdown makes it clear that taxes are a less significant factor in location decisions. Firms do want a tax structure that is competitive with those of other states but, given the trend toward competitive convergence in state tax rates, it is harder for states to offer significantly more attractive tax structures than their peers. Ady also suggested that when it comes to the perception of a state's tax system, the relative tax burden on existing capital and businesses also matters. If existing firms in the state are content with the tax structure, the state will find it easier to attract new firms. Existing firms are very important in establishing and spreading the reputation of the business climate to potential investors.

Operating conditions that are factors in the location decision include the availability of a competent workforce and right-to-work laws. In the living conditions category, Ady noted that costs are becoming more important than the quality of life in an area; in the past, the opposite was true. According to Ady, however, the most important factor in location choice is a qualified work force. The importance of an available skilled work force has continued to increase as changes in firm production have made labor force issues paramount. Firms increasingly use skilled labor and, at the same time, the market for such workers has tightened considerably.

Ady also stressed the importance of incentives in a firm's location decision, singling out training as the most important incentive. Schools do not consistently do a good job of preparing students for skilled and semi-skilled vocational jobs. Furthermore, firms want employees with strong interpersonal skills and the ability to learn, and they are reluctant to pay for this type of training because it is costly and because workers can carry away the value of such training to their next job. The second most important incentive is infrastructure development—especially development that is targeted and provides customized improvements. This accounts for 30% of the incentives offered by state-local governments nationwide and includes sewers and airports. An advantage for government in providing general infrastructure improvements is that the benefits often extend beyond individual firms to other residents and businesses in the area. An additional advantage is that the infrastructure improvements will remain behind even if the firm they were designed to benefit leaves the area. Ady noted that the broad-benefit nature of many infrastructure incentives should

*Infrastructure improvements will remain behind even if the firm they were designed to benefit leaves the area.*

*After at least a decade and a half of intense competition for investment and jobs, the state and local system of taxes and incentives has provided no clear inducement for firms to invest in higher unemployment areas.*

be taken into account in popularly reported figures on the *dollar cost of incentive per job* for facilities such as the recent BMW auto plant in South Carolina. The third form of incentive is firm-specific tax abatements. This type accounts for 10% of the incentives offered by governments. However, the reluctance of state and local governments to abate property taxes associated with running local schools makes business tax abatements less valuable. The property tax is normally the largest state and local tax faced by businesses, and schools are typically the largest draw on the local property tax base. Ady suggested that this and the *clawbacks* often included in abatement agreements (which may require that abated taxes be repaid if firms fail to create promised jobs) may reduce the importance of tax incentives as a business attraction tool in the future.

### **Do Politicians Structure Taxes to Encourage Growth?**

Alan Peters discussed his joint work with Peter Fisher, both of the University of Iowa, on industrial incentives and the pattern of competition among U.S. states and cities. The purpose of their work is to see whether evidence is available to suggest that the spatial pattern of industrial incentives and competition among cities and states leads to a redistribution of jobs to distressed areas. If the competition to offer the best incentives can create new opportunities for local residents with low reservation wages in high unemployment areas, this should support the contention that the practice of incentives may be a positive-sum game.

Peters and Fisher determined the preferred location for firms from a tax liability perspective based on a tax and incentive model (TAIM). Their methodological framework is similar in construction to that developed by Papke, but it extends that framework to include the use of selective tax abatements and other incentives by state and local governments. Peters and Fisher looked at eight different industry sectors, which included mostly footloose industries divided among small and large firm sizes. Firms are modeled as operating in 24 states and 112 cities and selling to the greater U.S. market. The model features a broad range of incentives, including tax and infrastructure incentives, job training assistance, and loan and grant programs. The only types of incentives excluded as being too general are so-called new wave or demand-side incentives designed to stimulate entrepreneurship, research and development, technology transfer, venture capital, and exports or foster the growth of small businesses. The model also excludes any federal discretionary incentives.

Peters and Fisher measured the change in the hypothetical firms' return based on different incentive packages. Comparing a project increment to cash flow across U.S. cities, they found that there was a large range in the rate of return. However, locales were mostly clustered, thereby suggesting that the rate of return was reasonably uniform for most cities. Peters and Fisher also compared the project increment to cash flow after tax and other incentives across states and cities. They found that these can change the project increment to cash flow significantly. (See table 5.) While high unemployment areas typically provide good tax incentives, they often negate some of this beneficial effect by failing to offer other valuable incentives, such as infrastructure improvements. Mostly, places with high unemployment also have high basic taxes. Peters noted that after at least a decade and a half of intense competition for investment and jobs, the state and local system of taxes and incentives has provided no clear inducement for firms to invest in higher unemployment areas.

Therese McGuire of the University of Illinois Institute of Government and Public Affairs discussed two state tax commission studies, one of which she directed, in which attempts were made to determine whether taxes were an important factor in promoting economic development. In a study for the Minnesota commission in 1984, McGuire and Michael Wasylenko found that taxes had a significant, albeit small, effect on economic development. However, when Wasylenko attempted to update and replicate the study in

**Table 5** Project Returns for Selected Firms: Average and Standard Deviation Across States and Cities

Multi-state Firm	After Basic Taxes Only			After All Taxes & Incentives			Value of Incentive Package	
	Mean	St. Dev.	SD/Mean	Mean	St. Dev.	SD/Mean	Mean	% of Return*
<b>States:</b>								
<i>State Taxes and Incentives</i>								
#5: Soaps & Cleaners	8,580,693	327,237	0.04	9,152,528	411,847	0.04	571,835	6.2%
#7: Misc. Plastics	328,819	51,548	0.16	629,656	204,814	0.33	300,837	47.8%
#12: Electronics	12,592,373	2,125,141	0.17	14,526,660	2,828,459	0.19	1,934,288	13.3%
#14: Automobiles	24,090,255	5,869,814	0.24	27,295,432	7,205,526	0.26	3,205,177	11.7%
#16: Instruments	62,760,898	2,250,306	0.04	64,480,585	2,759,552	0.04	1,719,687	2.7%
<b>Cities:</b>								
<i>State and Local Taxes &amp; Incentives</i>								
#5: Soaps & Cleaners	7,897,374	369,066	0.05	8,657,364	454,925	0.05	759,990	8.8%
#7: Misc. Plastics	106,773	100,372	0.94	457,198	204,170	0.45	350,426	76.6%
#12: Electronics	4,562,124	3,739,239	0.82	7,605,776	3,954,114	0.52	3,043,653	40.0%
#14: Automobiles	1,500,313	12,909,393	8.60	7,843,902	12,565,551	1.60	6,343,589	80.9%
#16: Instruments	56,522,017	2,738,309	0.05	59,181,802	2,999,244	0.05	2,659,785	4.5%

\*Mean incentive package value divided by mean project return after all taxes and incentives.

Source: Alan H. Peters, "Industrial Incentives: The Pattern of Competition among U.S. States and Cities," presentation prepared for the workshop "Designing State–Local Fiscal Policy for Growth and Development," held at the Federal Reserve Bank of Chicago, July 17, 1996.

conjunction with the Arizona Tax Commission's work in 1989, he found that tax levels were not significant in promoting economic growth. This suggests to McGuire that predictability of the tax structure may be a more important factor.

McGuire said that one of the important lessons from these studies is that there may be a tendency to focus too much on taxes as they affect economic growth. The impact of taxes is small as evidenced by statistical work where tax variables rarely generate large coefficients. To have a large effect on development, taxes must be reduced dramatically, and it is unclear what the net effect would be on economic development given the concomitant reductions required in state spending, much of which supports development. Low taxes alone are not adequate to support economic growth. Thus, states should emphasize development of stable and certain tax systems that are in line with practices in other states. In the long run, this could be the most beneficial strategy for achieving development goals.

Bob Tannenwald of the Federal Reserve Bank of Boston discussed his experience with state tax commission studies; he observed that policymakers believe that taxes matter, regardless of the evidence. In assessing Massachusetts's tax climate, Tannenwald has applied Papke's methodology. He discussed some of the studies Raytheon presented to the Massachusetts legislature to justify the use of the single weighted sales factor in the apportionment factor. He concluded that recent policies in Massachusetts may look somewhat bipolar to national observers. Although, on the one hand, there is a latent anti-business culture in Boston, on the other hand, there is a significant number of attractive tax incentives that are being passed in the Massachusetts legislature. This divergence might reflect the intense competition among bordering states in the New England region in response to the region's faltering economy. Assessing future directions for research, Tannenwald argued that more work should be done on the tax burdens of households; behavioral studies could well show that, because of the increasing importance of attracting a high-quality skilled work force, high burdens on high-income households are a significant factor in firms' location decisions.

*To have a large effect on development, taxes must be reduced dramatically, and it is unclear what the net effect would be on economic development given the concomitant reductions required in state spending, much of which supports development.*

In the discussion that followed, Mark Haas of the Michigan Treasurer's office noted that the age of the data used in several of the studies might call into question the validity of the findings. Many in the Michigan legislature would consider the results useless since the economic experience of the last five years in the Midwest has been so different from the past. Several of the presenters noted that it is difficult to get comparable newer data due to the four year lag with which the U.S. State and Local Government Finance data are produced. Lee Munich of the Humphrey Institute at the University of Minnesota noted that there seems to be a higher level of significance on the predictability of taxes and their effects on development rather than on the level of taxes themselves. This relates to the perceptions of business investors, in which state reputations can exert long-lasting influence. Papke argued that it would be an improvement if all agencies agreed on one standard way to look at business tax differentials. The current tendency is to pick and choose among a series of tax burden measures to select those that best make the case of the researcher or advocate. This can mislead policymakers. A single measure, such as his AFTAX model, would make it easier to determine the effects of a state's business tax structure. Tom Pogue of the University of Iowa expressed the view that no single measure could adequately capture all of the information policymakers might want. Haas pointed out that the use of a single metric could also be misleading since different measures are used to look at different issues. William Oakland, economics professor at Tulane University, agreed with Pogue and noted that while the AFTAX approach is useful, it has its weaknesses. For instance, not all firms are footloose or taxable. Furthermore, public services provided to business also need to be considered (see final session).

### Evaluating Economic Development Policies

Luncheon speaker Paul Courant of the University of Michigan presented his perspective on how economic development policies and tax incentive programs should be evaluated. Courant argued that the proper measure of the effectiveness of an economic development program should be its contribution to enhancing economic welfare, rather than simply the program's ability to create jobs or attract new investment. Too often, he said, it is assumed that economic welfare will be enhanced through investment and job creation without really examining the relationship between the two, particularly in cases where government subsidies are used to spur development. Courant argued that economists can provide better guidance to policymakers by spending more time evaluating ways in which economic welfare can be enhanced, rather than concentrating on statistical studies that examine the raw effects of development programs.

*Economists can provide better guidance to policymakers by spending more time evaluating ways in which economic welfare can be enhanced, rather than concentrating on statistical studies that examine the raw effects of development programs.*

Many of the studies to date document a wide array of growth consequences as measured by gross employment growth, branch plant openings, small business startups, foreign direct investment, and other economic variables. However, it is far from clear how these are related to either individual or community well-being, and economists have done little to relate these raw effects to useful policy recommendations. Furthermore, studies have yielded such a wide range of impact estimates as to be largely irrelevant. Owing to the wide geographic dispersion of places studied, these impact estimates often reflect only the *average* effect of a given policy among a wide range of potential effects. Tax and spending patterns can be very heterogeneous, as well as the quality and nature of the public sector services provided, which might influence economic growth. Knowing the average impact of a specific abatement policy may not be of much assistance to local decisionmakers, who are trying to figure out whether a particular policy will work in their community. According to economic theory, for an economic development policy to succeed, it must cause an outward

*A good example of such a misguided approach is the common practice of governments trying to provide subsidies for capital.*

*What should governments do? First provide local public services at the lowest possible unit cost; and second develop tax structures that tax mobile factors based on a benefits principle.*

shift in the demand curve, thereby increasing equilibrium output by improving the productivity of labor and capital. However, Courant noted that most policies simply provide subsidies that create movement along the demand curve without increasing equilibrium output. Essentially the *marginal product* or productivity relation that is specific to the locale stays put.

A good example of such a misguided approach, in Courant's view, is the common practice of governments trying to provide subsidies for capital. While the subsidies may generate additional employment and output, they do not really enhance economic welfare because the cost of the subsidy exceeds the job and output gain. Courant offered an analogy of a locale trying to improve its fortunes by creating a gold rush. One way to create a gold rush would be to go out and buy some gold, bring it back to your community, and bury it in the ground. You could then announce that you found gold and people would come to dig it up but, in the end, all that would be left would be the value of the gold. The costs of buying the gold, transporting it, and digging it up might be ignored. Courant suggested that this is one reason communities pursue subsidies; they create the illusion that employment and output have grown. The jobs and new investment are easy to identify, while the costs of the subsidy are widely dispersed across the local economy.

A related reason may be that growth policies benefit special interest groups, such as land owners and owners of fixed or in-place capital facilities. In some instances, workers may not recognize that wages are bid up only temporarily by economic growth, pending the arrival of in-migrating laborers. For this reason, winning political coalitions are formed, which subsidize new capital investments from taxes paid by all residents.

Given these inefficiencies, why do policymakers pursue strategies geared toward increasing the aggregate number of jobs? Courant suggested that because jobs hold special significance in society, people are willing to subsidize the creation and maintenance of jobs even if it is economically inefficient. If workers become dislocated, the costs of moving to another community may be very high. Not only do workers have to sell their homes, but they also lose location-specific knowledge that is of both social and economic benefit. Additionally, the psychology literature identifies the health and social benefits of being employed. Having a good job and social status in the community appear to be highly valued by individuals. Courant suggested that given the importance of having employment here and now, many individuals would probably be willing to insure themselves against being unemployed. We should perhaps not dismiss the possibility that government acts as an efficient provider of such insurance. To examine this issue, Courant argued that analysis incorporating such *insurance value* should be part of an assessment of the overall net welfare improvements (if any) that result from local development policy. In many cases, government may not be capable of playing the role of insurer; the costs of doing so may be cumulative and prohibitive for locales hosting declining industries.

If the current approach to economic development strategy is inadequate, what should governments do? If governments begin to use enhanced net economic welfare as the measure for evaluating their economic development efforts, Courant said they need to focus on two broad policies. The first is providing local public services at the lowest possible unit cost; and the second is developing tax structures that tax mobile factors based on a benefits principle. Additionally, it is important that the evaluation of the mix of services and how mobile factors are taxed is on a case-specific basis. *Average* information about behavioral responses to a policy, drawn from a heterogeneous population of state and local economies, cannot convey much relevant information to a local decisionmaker trying to determine whether a policy is worth pursuing.

Courant concluded by suggesting some potential research avenues that might help policymakers improve their assessment of development policy options. These include:

- Undertaking careful measurement of the benefits received by mobile factors and the costs to local governments of providing government services.
- Calculating on a case by case basis the local cost of providing incentives.
- Studying who receives the jobs and income from new investment when using incentives to influence the distribution of benefits through economic development.
- Looking for potential agglomeration economies (i.e., winning opportunities to encourage business clusters) and ways to exploit them, while maintaining a healthy skepticism about the presence of such agglomeration economies (or other types of market failure).
- Identifying how important local jobs are and how much, on average, local residents are willing to pay for the existence of a local job based on various characteristics.

In the ensuing discussion, Charles Bonser of Indiana University said that the public availability and transparency of the information concerning the incentives might be a key factor in improving economic development programs. Voters find it hard to evaluate whether offering incentives is a good idea because they are not provided with information about the costs. Bonser asked whether legislation to make known the particulars of development policies could improve the decisions and policies being made by local governments. Mike Peddle of Northern Illinois University suggested that one way to test whether voters favor development through incentives or tax breaks (as well as their willingness to pay for it) would be to put economic development agreements and deals to a voter referendum.

Art Rolnick of the Federal Reserve Bank of Minneapolis said that *sunshine* legislation that would provide more information to the public was not an altogether helpful proposal. He argued that Courant's analysis is based on a model that (mistakenly) assumes that government officials act irrationally when they rely on traditional economic development strategies. Rolnick added that the pursuit of jobs and new investment did reflect the desires of their constituencies, but that the local perspective on development policies—however well-conceived with regard to local self-interest—often leads to ruinous outcomes. Therefore, an improved method among economists in conducting welfare analyses from the local perspective or providing better information to voters would not improve public policies at all.

### **Is There a Role for Regional Tax Policy?**

The first afternoon session took up the issue of whether the common state and local government practice of using selective tax abatements to attract businesses should continue or whether such abatements should be prohibited by the federal government. The debate focused on the possible economic properties of incentives and the practical and legal issues of regulating selective incentives.

Rolnick and Mel Burstein, also of the Federal Reserve Bank of Minneapolis, presented their joint work on delimiting selective abatements. First, Rolnick discussed the economic issues, citing the Minnesota case of Northwest Airlines. The state in 1992 provided an \$800 million loan package to the airline to construct a large maintenance facility in Duluth (to date, it has not been built). Rolnick noted that such cases, in which jobs are not created but just relocated, provide evidence that selective abatement competition misallocates private resources and, due to revenue losses, causes state and local governments to provide too few of those public goods that are vital to growth and welfare. Subnational governments cannot refrain from participating in the incentives bidding process; failure to participate (while others do so) would result in the loss of local jobs and investments. However, from the national perspective, this behavior results in lost economic output as firms shift investments away from their optimal locations in response to tax incentives. For example, it makes little economic sense for Northwest Airlines to build a maintenance facility in a remote, cold climate city.

*Subnational governments cannot refrain from participating in the incentives bidding process; failure to participate (while others do so) would result in the loss of local jobs and investments.*

*There is a difference between general even-handed competition among state and local governments in keeping taxes low and services high and selectively targeting firms for special treatment.*

*Federal penalties could be devised, which would make such competition costly if states ignore federal prohibitions.*

*It may be beneficial to use targeted incentives to attract firms that will create greater social benefits, such as providing high wages or hiring local residents.*

Rolnick noted that it may be surprising to some to hear an economist suggest that competition among states is bad. But this is not competition among private entities, but competition among government entities. There is a difference, Rolnick argued, between general even-handed competition among state and local governments in keeping taxes low and services high and selectively targeting firms for special treatment. Rolnick suggested that equal treatment of equals within a state or locality should guide policy in this area.

Next, Burstein addressed the legal issues, noting that the only way to stop this futile bidding process is for Congress to invoke its powers under the Commerce Clause of the Constitution to delimit the use of selective incentives. Congress must act, he said, because the states cannot stop this competition on their own. The political costs of not participating in the incentive game are too high and as long as one state chooses to offer incentives, others will feel they have to follow. Burstein suggested that federal penalties could be devised, which would make such competition costly if states ignore federal prohibitions. These enforcement mechanisms might include taxing explicit and imputed income accruing from public subsidies; denying tax exempt status for public debt used to compete for business; and impounding federal funds to states that engage in such competition. Without federal prohibition, Burstein argued, the difficulty of accounting for the use of public money and of assessing the real costs of these abatements will allow the abatements to continue.

Tim Bartik of the Upjohn Institute and Graham Toft of the Indiana Economic Development Council presented an opposing view. Bartik suggested that a broad prohibition of these types of incentives could end a number of interesting experiments by the states that are designed to improve local conditions and welfare. He argued that the claim of inefficiency was a weak one, particularly if abatements are targeted to distressed areas. Nonetheless, subnational governments should be judicious in their use of incentives. He cited three factors that could allow incentives to pass a benefit-cost test. First, the incentives should be targeted to an area where unemployment is high, thereby creating jobs in a community where they otherwise would not exist. Second, the jobs created should pay higher wages than is the norm for the community. Third, the jobs should go to local residents. If these criteria are met, the benefits from the incentive program could outweigh the costs.

Addressing the issue of equal treatment, Bartik noted that since different types of firms may impose different social costs and benefits on society, it may not be a good idea for state governments to treat all firms equally. For example, it may be beneficial to use targeted incentives to attract firms that will create greater social benefits, such as providing high wages or hiring local residents. Similarly, selective incentives that work efficiently in distressed communities may lower transfer payments to the poor.

Bartik also pointed out that while, in some extreme cases, huge incentive packages have been used to lure or assist specific firms (such as the Northwest Airlines case cited earlier), for the most part incentives are used in important but less visible projects. For instance, all downtown redevelopment projects depend on incentives. Outlawing these types of incentives could end programs that help businesses with overseas exports or minorities and women to open new businesses. Customized training programs, which are of increasing importance to firms, would also be eliminated by a federal prohibition on selective incentives.

Bartik then asked how the federal government would be able to implement such a ban on incentives. This would require the federal government to check each state and local government incentive to determine which ones would be legal. This policing of state and local incentives would be a very difficult administrative task. Instead, Bartik suggests that the correct federal role might be to encourage more rational competition between the states when it comes to offering incentives, by encouraging the use of those incentives that provide greater national benefits.

*General state tax structures are suboptimal and capricious in their impact on particular firms or industries. States then use incentives and abatements to improve the outcomes for important industries.*

*Markets are much better than governments at determining which investments should take place.*

Finally, Bartik suggested that there are many more moderate ways to alleviate the problems that state tax competition causes. For example, he would like to see more rules on how and how much money states could dole out to businesses. Similarly, accountability for using incentives could be improved by making incentives more short term and focusing on training and infrastructure improvements. Long-term incentives such as 50-year property tax abatements are rarely much of an inducement to relocating firms and they reduce accountability by making it harder to examine whether the cost of the long-term abatement is negated by the benefits received from the new investment. In addition, states are better off when they focus on infrastructure and training incentives, since these benefits often remain in the state even if the firm that received the incentives leaves. Finally, Bartik recommended that states recover their subsidies through the use of clawback agreements if the benefits promised by the firm fail to materialize.

Toft talked about the practical use of tax abatements based on his experience in Indiana. He explained that many of Indiana's abatement programs reflect the state's desire to maintain its manufacturing base. States like Kentucky have been very aggressive in pursuing manufacturing firms and Indiana has tried to respond to this competition. Global competition has also been a significant factor, given that incentives offered in developing nations far exceed those offered anywhere in the U.S.

Toft also argued that general state tax structures are suboptimal and capricious in their impact on particular firms or industries. States then use incentives and abatements to improve the outcomes for important industries. Toft agreed that creating different tax treatments for firms with differing structures may be rational. For example, Indiana depends on manufacturing, so it has made a strategic choice to focus tax abatements on that industry. Manufacturers perceive incentives as helping to level the playing field. Nonetheless, Toft said that many abatements are used too broadly and are poorly managed. Toft agreed with Bartik that the benefits of incentives can be improved if the majority of incentive funds go to distressed and designated economic development areas. Finally, Toft argued that federal noncompetition laws would be counterproductive by discouraging adjustments to state tax climates.

Rolnick responded to Bartik's presentation by stating that the primary rationale for government intervention in a market economy is to prevent or ameliorate market failure. He suggested that the government should intervene only if there is a proven market failure and government could fix it. The use of selective incentives fails as such a tool, Rolnick said, because many incentives address perceived rather than actual market failures. An example of this that drew federal government action was the state-local use of Industrial Revenue Bonds (IRBs). States were using these to fund private activities, many of which were wasteful and should never have taken place. IRBs were also being used as unnecessary subsidies to private firms that could have received financing through traditional market mechanisms. The federal government prohibited these practices as part of the 1986 tax reform legislation. Finally, Rolnick said that if overall business taxes could be lowered by eliminating tax abatements, this would be beneficial to everyone in an evenhanded fashion. Moreover, markets are much better than governments at determining which investments should take place.

Courant suggested that some firms that might not be able to receive funding from traditional market sources could still produce goods or services that would enhance social welfare. For example, a firm that reprocessed waste into fertilizer might not have great appeal for private funding sources, but the social benefits could make it worth funding. Burstein replied that such instances could be taken care of by means other than selective incentives. For example, waste-producing firms should be charged appropriate disposal fees, thereby giving them a market signal to reprocess their waste or deliver it to another firm for reprocessing.

*The point is not to acquire a particular firm or investment, but to improve the appropriate industry cluster. Moreover, the federal government cannot discern, in practice, which incentives to prohibit and which to allow.*

*The benefit principle of taxation suggests that taxes should be imposed in strict relation to benefits received by the taxpayer.*

*Public services become an additional factor of production, much like labor or capital, whose cost is appropriately embedded into the final prices of goods produced.*

Toft said the impact multipliers are the real issue in evaluating any economic development strategy. The point is not to acquire a particular firm or investment, but to improve the set of synergies or multipliers by fostering the appropriate industry cluster. Moreover, Toft does not believe that the federal government can discern, in practice, which incentives to prohibit and which to allow. Success stories like Indianapolis' rebirth as a center for sports, retail, and other industry clusters would have been stifled by federal limits on selective incentive tools.

A final issue raised by David Merriman of Loyola University and Bonser concerned the relative neutrality of federal actions when it comes to economic development. Both argued that federal actions do not treat equal firms equally, because certain public goods are given on a preferential basis to specific firms. Defense contracts and the like are not distributed on an equal basis and these certainly are examples of economic development incentives. Why should the federal government be allowed to offer such preferential treatment, while prohibiting the states from doing so. Burstein replied that rules and regulations on preferential treatment can be developed for the federal government. At the state level, preferential treatment is the product of intense competition, with one state trying to match incentive packages offered by another state without considering whether the overall *game* is rational. In the past, fledgling efforts among groups of states, including the Great Lakes states, to form compacts to prohibit or delimit bidding for business have not been successful. Burstein concluded by reiterating that all states would be better off if they were prohibited from offering incentives.

### **The Expenditure Side of Policy**

The final workshop session addressed general tax and fiscal structure. How should state and local governments fashion their tax structures with regard to business development and growth? Oakland and Testa advanced the proposition that the only defensible principle on which state and local governments could tax the business sector is the *benefit* principle, whereby taxes paid by an individual or organization exactly cover the cost of services provided by government. Thus, the tax system becomes one of user charges paid to government for services rendered. The competing principle is *ability to pay*, which implies that wealthy individuals pay more according to widely accepted notions of equity and fairness. However, the ability to pay principle cannot be relied upon in structuring taxes imposed on the business sector. There are major uncertainties about how the burdens of business taxes are ultimately shifted to individuals in various income classes. Given these uncertainties, business taxes are clumsy instruments for achieving equity among individuals. This defect cannot be overcome by using firm profitability as an indicator of ability to pay. Shares in large, prosperous corporations are widely held by pension funds and by charitable foundations, while many small, closely held firms are owned by wealthy individuals.

The benefit principle of taxation suggests that taxes should be imposed in strict relation to benefits received by the taxpayer. Thus, business taxes should cover the costs of public services provided to the business sector. By following this principle, the prices of goods and services produced by business will accurately reflect the real costs of those public services inherent in the value of the product; public services become an additional factor of production, much like labor or capital, whose cost is appropriately embedded into the final prices of goods produced. Consumers can then make intelligent choices based on those prices. Moreover, benefit taxation will encourage wise choices by the voting public on the types and levels of services state and local governments should provide. On the other hand, failure to tax business for services rendered might encourage voters to stop funding vital business services, such as roads and bridges, while the mistaken belief that businesses could bear the tax burden of household services, such as health services and parks, could result in

*Any restructuring of the tax system in accord with the benefit principle would therefore require lower taxes or greater business-related public services.*

overprovision of these services. Furthermore, the inordinate taxation of mobile factors of business production, such as capital investment, can lead firms to flee the taxing state or jurisdiction to avoid the tax burden.

Do existing tax practices of state-local governments approximate the benefit principle? To answer this question, Oakland and Testa examined tax-financed state-local expenditures nationwide, paying particular attention to the Midwest, on public services benefiting households versus those benefiting business entities. Comparing each state's dollars of business taxes paid against dollars of public services received, it is clear that taxes far outweigh business services (see table 6). In midwestern states and in other regions, the ratio of state-local business taxes to tax-financed business services ranges from 1.5 to 2.0. Any restructuring of the tax system in accord with the benefit principle would therefore require lower taxes or greater business-related public services.

**Table 6** State and Local Business Taxes and Expenditures, 1992

Region	Business expenditures	Taxes	Ratio of taxes to expenditures
(—millions of dollars—)			
U.S.	\$94,136	\$160,514	1.71
New England	5,076	9,022	1.78
Mid-Atlantic	16,762	29,899	1.78
East North Central	15,077	27,781	1.84
West North Central	6,228	9,843	1.58
South Atlantic	15,735	22,837	1.45
East South Central	4,290	6,768	1.58
West South Central	8,589	17,909	2.08
Mountain	5,471	8,169	1.49
Pacific	16,906	28,285	1.67
Seventh District	12,760	23,816	1.87

Source: Staff calculations based on data reported by the U.S. Department of Commerce, Bureau of the Census, Governments Division and individual state fiscal agencies.

*A uniform tax on value added would neither discriminate against capital-intensive firms nor favor the ever-growing service sector.*

Oakland and Testa proposed a single business tax which would be levied at a uniform rate on the value added by *origin* of businesses. Such a tax would have several advantages. First, if businesses were taxed in proportion to their value added, the taxes paid would closely vary according to the size of the firm and its attendant public services consumed. Second, taxing by origin would mean that taxes were levied in proportion to the geographic location of business activity (i.e., production). Since public services are presumably consumed by locally producing firms, this system would accord with the benefit principle. Lastly, a tax on value added is neutral with respect to each firm's choice of method of production. Unlike the current hodge-podge of state-local business taxes, a uniform tax on value added would neither discriminate against capital-intensive firms nor favor the ever-growing service sector.

Looking at the competitive *tax climate* features of current state-local systems, Oakland and Testa compared current business taxes by state in relation to each state's value added. They found that business taxes as a percent of value added would result in much more modest tax rates—in the range of 2.5% to 3.5%. If business taxes were brought down to levels commensurate with costs of public services provided, these rates would be even more modest—in the range of 1.5% to 2.5% of value added. In assessing the current tax climate, the presenters look at the dollar difference between taxes paid and benefits received by state, and they

**Table 7** Comparison of Tax Burden Measures—Business Taxes Only vs. Business Taxes in Excess of Benefits Received

Region/State	Tax measure (rank)	Excess Taxes (rank)	
U.S.	3.1%	—	1.3% —
New England	2.9	(6)	1.3 (6)
Mid Atlantic	3.4	(1)	1.5 (4)
E. North Central	3.2	(3)	1.5 (4)
W. North Central	2.8	(7)	2.0 (1)
South Atlantic	2.7	(8)	1.8 (2)
E. South Central	2.5	(9)	.9 (9)
W. South Central	3.3	(2)	1.7 (3)
Mountain	3.1	(4)	1.0 (8)
Pacific	3.1	(4)	1.2 (7)
<b>Seventh District</b>			
Illinois	3.5	(2)	1.7 (1)
Indiana	2.9	(5)	1.6 (2)
Iowa	3.4	(3)	1.2 (5)
Michigan	3.2	(4)	1.4 (4)
Wisconsin	3.9	(1)	1.6 (2)

Source: William H. Oakland and William A. Testa, "State-local business taxation and the benefits principle," *Economic Perspectives*, Federal Reserve Bank of Chicago, January/February 1996.

*Tax reductions of 50% to 60% would be required to bring Canada's nonresidential tax system back into line with the benefit principle*

do so, again, in relation to value added. Consideration of benefits received can make a significant difference in rankings among states and regions and relative to national averages (see table 7). Oakland and Testa believe that such benefit-principle measures of tax climate present a favorable alternative to the cost of capital measures presented by Papke earlier. Benefit-principle measures are easily understood and easily calculated. Most importantly, adoption of such measures would promote good government and a neutral tax structure with respect to business development. Any remaining differences among states in tax levels would reflect conscious choices to provide different levels and mixes of public services. Accordingly, one could expect constructive dialog between the business sector and its government in fashioning and financing critical government services.

Harry M. Kitchen discussed joint work with Enid Slack, both of Trent University, Ontario, Canada, which took a similar approach to appraising the existing tax system. Businesses in Canada face two major business-related taxes: the corporate income tax and the nonresidential property tax, the latter being imposed by municipal governments. Considerable variation exists across provinces in municipal property tax rate structures, but all systems favor residential property over nonresidential property.

Many contend that Canadian property taxes are too high, citing lower property tax rates in the U.S. However, Kitchen argued that taxes paid in relation to benefits received is the most appropriate basis in evaluating the nonresidential tax system, both with regard to competitive comparisons across municipalities and to the favorable features inherent in benefit-principle tax structures. Kitchen compared nonresidential tax collections in eight Ontario cities to the dollar cost of public expenditures on business-related services. Using a methodology based on existing studies that examine business versus residential consumption of public services including water, sewer, waste disposal, and transportation, Kitchen reported similar results to those of Oakland and Testa above. He concluded that tax reductions of 50% to 60% would be required to bring Canada's nonresidential tax system back into line with the benefit principle (see table 8).

**Table 8** Nonresidential Property Taxes and Tax Rates

	Nonresidential (NR) proportion of taxes	Nonresidential proportion of municipal and education expenditures	Percentage change in NR property taxes
Cornwall	50	21	-59
London	37	16	-56
Niagra Falls	46	21	-55
Oakville	30	13	-57
Peterborough	41	18	-56
Thunder Bay	51	20	-61
Whitby	28	14	-51
Windsor	46	20	-56

Source: Presentation by Harry M. Kitchen at the "Designing State-Local Fiscal Policy for Growth and Development" workshop, Federal Reserve Bank of Chicago, July 17, 1996.

*Signs of business support for education reflect the general view of business and other citizens that the public sector should provide efficient and adequate levels of services (such as parks and public health) that are necessary to maintain general living conditions.*

During the ensuing discussion, Courant commented on the Oakland/Testa approach to measuring tax climate as the excess of business tax payments over benefits received. Courant cautioned that the portion of business taxes lying above benefits could not easily be construed as the tax *burden*. Similar to the competing approach, which treats all business taxes as punitive, such burdens would be shifted away from the business entities, owners, or participants through changes in their behavior. Accordingly, a burden measure of this sort would require separate *incidence analysis* for each type of business tax. Oakland and Testa responded that, while this held true, other competing business climate studies suffered from the same defect. Moreover, the presenters did not claim to be measuring tax burden per se, but rather were displaying the extent to which states would need to lower business taxes to come into alignment with the benefit principle.

Several participants challenged the allocation of public spending on education between the household sector and the business sector. Both the Oakland/Testa and Kitchen presentations allocated 100% of such spending to the household sector, while several participants felt that education benefits the business sector and should be allocated as such. The presenters responded that labor markets generally operate such that laborers receive the value of their product to the firm. Signs of business support for education reflect the general view of business and other citizens that the public sector should provide efficient and adequate levels of services (such as parks and public health) that are necessary to maintain general living conditions. Conference participants agreed, but argued that at least a small part of government spending on education may be tailored to provide the type of training that specific firms, rather than their workers, would benefit from.

The final presentation of the workshop was by Randy Eberts, executive director of the Upjohn Institute. Eberts presentation focused on the expenditure side of the state-local fiscal equation. While much of the workshop emphasized the effect of taxes on local economic development, Eberts addressed the services that these taxes support and the benefits they provide to businesses. Assessing the effects of services on firm location and economic development is more difficult than assessing the effects of taxes on the cost of doing business in an area. First, services are much more difficult to measure. Most studies have simply equated the amount of spending by local governments with the amount of services provided. However, the efficiency with which tax dollars are spent and the effectiveness of the delivery of services are major factors in how beneficial these services are to businesses. Some measures other than expenditures are available. For example, studies have examined the effect of student test scores as measures of workforce quality on firm location. Others have correlated physical attributes of various infrastructure facilities with economic growth measures.

Second, benefits are typically more widespread than costs. It is relatively easy to determine the tax liability of representative firms through straightforward accounting methods. However, benefits may accrue to parties that do not directly pay taxes. For example, education benefits not only those who attend school but also society at large, by enhancing the quality of the workforce and the citizenry. While highways obviously benefit those who drive on them, an efficient highway network can also affect the price and variety of products and the competitive advantages of regions. Accurately recording the externalities associated with these services is often difficult.

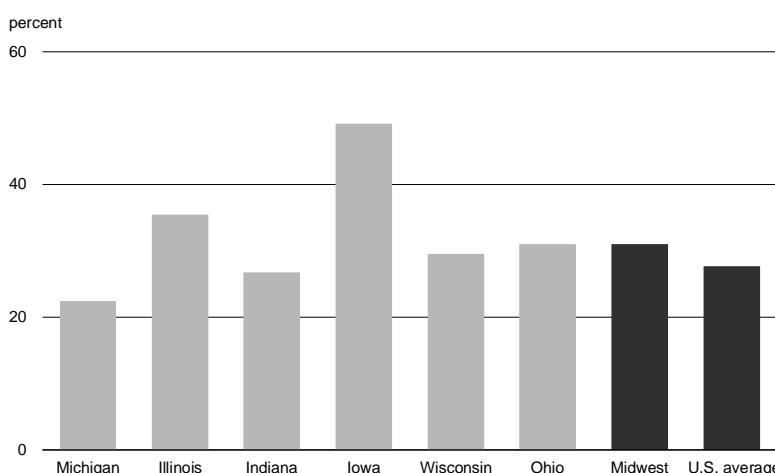
Eberts focused the remainder of his presentation on one major function of state and local governments that is potentially important for economic development: the construction and maintenance of roads and highways. Considerable research has been conducted in recent years to estimate the contribution of highway investment to economic development. Measures of the stock of highway capital and physical attributes are available. Eberts discussed the condition of highways in the Midwest relative to the U.S., trends in highway investment at the regional and national levels, and the empirical research linking highways to economic development.

### Highways

Eberts noted that state and local governments put in place most of the nation's highway system. Although the federal government provides significant funding through the federal gas tax and the highway trust fund, state and local governments are responsible for construction, maintenance, and much of the planning. Highways comprise a significant part of the nation's fixed nonresidential capital stock. Highway capital stock exceeds \$600 billion, valued in 1987 dollars, which is about two-thirds of the nation's manufacturing capital stock and a little over one-tenth of all private nonresidential capital.

Highway expenditure is the largest single capital outlay of state and local governments. At the national level, 27% of state-local governments' capital outlay budget goes to highways, with education (both k12 and higher education) a close second at 23%. Eberts reported that the Midwest (defined here as Illinois, Indiana, Iowa, Wisconsin, Michigan, and Ohio) follows the national pattern fairly closely, with 31% of the region's capital outlay budget going to highways and 26% to education. Among the Midwest states, Iowa devotes the largest share of its capital budget to highways, at 49%, and Michigan the smallest share, at 22% (based on 1992 figures). (See figure 4.)

**Figure 4** Highways' Share of Total Outlays



Source: Randy Eberts, "Infrastructure's Role in Economic Development," presentation prepared for the workshop "Designing State-Local Fiscal Policy for Growth and Development," held at the Federal Reserve Bank of Chicago, July 17, 1996.

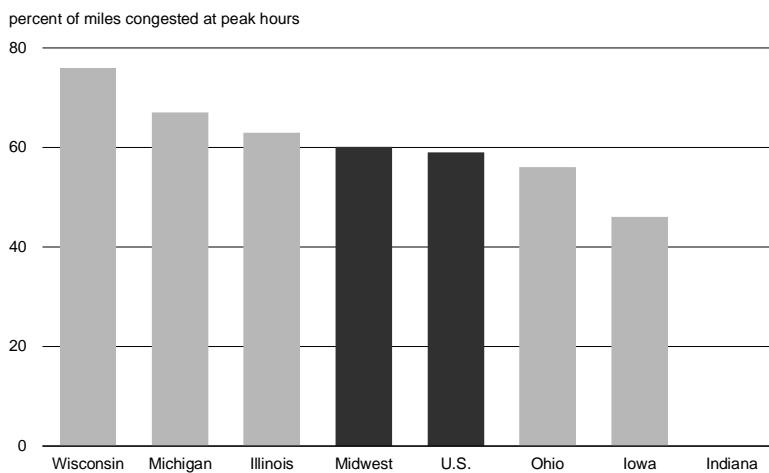
*Among the Midwest states, Iowa devotes the largest share of its capital budget to highways, at 49%, and Michigan the smallest share, at 22% (based on 1992 figures).*

*From 1980 to 1992, highway capital outlays per capita increased 51%, having declined during the previous two decades. Highway capital outlays per capita in the Midwest grew 65%.*

Eberts said that in recent years, capital outlays for highways (on a per capita basis and adjusted for inflation) have increased considerably for the U.S. and the Midwest. From 1980 to 1992, highway capital outlays per capita increased 51%, having declined during the previous two decades. Highway capital outlays per capita in the Midwest grew 65% during this period. Some of this faster growth in per capita outlays in the Midwest is associated with a faster increase in the use of highways. Vehicle miles per person rose 35% in the Midwest, compared with 31% nationwide. The result is a 22% increase in highway outlays per vehicle miles for the Midwest versus a 15% increase for the U.S.

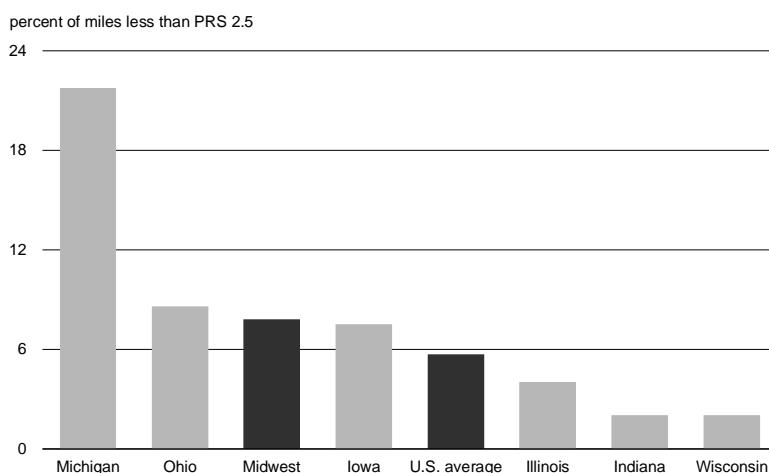
There is considerable variation in the quality of Midwest highways and the level of highway congestion (see figures 5 and 6). According to 1992 interstate highway assessments, Midwest states had some of the worst and some of the best stretches of interstate highways. Among all states, Michigan had the highest percentage of its interstate system in poor condition; about 25% of its interstate system was rated as needing attention immediately or within the next few years. Wisconsin had the lowest percentage of interstate that needed immediate attention. Wisconsin had the highest percentage of miles of congested urban interstates at peak hours, while Indiana had the lowest among Midwest states, according to recent Federal Highway Administration statistics.

**Figure 5** Congestion on Urban Interstates



Source: See figure 4.

**Figure 6** Interstate Pavement Condition



Source: See figure 4.

## Highways and Economic Development

There is little doubt that highways are essential for economic development. Highways are the primary means by which businesses transport their products and markets are linked together. More than 70% of goods manufactured in the U.S. are transported by trucks along the nation's highways. Well maintained highways are critical for cities and states to attract and retain business. CEOs list access to major highways as a key factor in location decisions.

In addition to providing direct services to businesses and households, Eberts noted that highways affect economic performance by enhancing the productivity of other factors of production, such as labor or private capital, and by creating an attractive economic climate. In addition, highway construction stimulates local economies.

*Well maintained highways are critical for cities and states to attract and retain business. CEOs list access to major highways as a key factor in location decisions.*

Research in recent years has focused on the impact of an additional dollar of highway investment on economic development. Some initial estimates found extraordinary returns to public capital investment, which indicated significant under-funding of public capital stock, particularly highways. These estimates also promised almost immediate pay-back in terms of higher output growth from investment in public capital. Eberts suggested that recent refinements to these estimates show a much more modest overall impact of additional highway investment on economic productivity. While consensus has yet to be reached, recent studies indicate that a 1% increase in highway capital stock reduces business costs by 0.06% to 0.08%. These estimates vary by industry. For industries such as primary metals and motor vehicles, which are concentrated in the Midwest, a 1% increase in highway capital stock reduces costs 0.22% and 0.19%, respectively (see table 9). Infrastructure investment alone may not be sufficient to stimulate growth. However, for regions that experience bottlenecks and congestion, additional investment to make the highway transportation system more efficient could enhance regional productivity and competitiveness.

In examining the role of state and local governments in economic development, it is important to consider the benefits businesses and households receive as well as the costs they incur. Presenting a balanced view of the fiscal package can help local governments allocate resources in a way that best serves the needs of businesses and households, thereby creating an environment for growth.

**Table 9** Public Capital Elasticities

Industry	
Primary metals	-0.22
Printing & publishing	-0.20
Instruments	-0.19
Motor vehicles	-0.19
Stone, clay, and glass	-0.18
Petroleum refining	-0.17
Fabricated metals	-0.17
Rubber and plastics	-0.16
Machinery, ex electrical	-0.16
Chemicals	-0.16
Electrical machinery	-0.15
US total economy	-0.04
Transportation & warehousing	0.03
Construction	0.07

Source: Randy Eberts, "Infrastructure's Role in Economic Development," presentation prepared for the workshop "Designing State-Local Fiscal Policy for Growth and Development," held at the Federal Reserve Bank of Chicago, July 17, 1996.

*Most accounts suggest that state–local governments responded to the Midwest’s economic misfortunes with a successful blend of measured prudence and bold innovation.*

*Evidence from state boundary communities, where taxes and regulations differ while other factors are the same, suggests that fiscal policies can play a significant role in the location of employment and investment.*

*The public is often misled into viewing the rewards of development programs in terms of often-reported jobs created.*

## Conclusion

The fiscal condition of Midwest state and local governments has surely been bolstered by the region’s economic resurgence. On average, state–local fund balances are solid and debt levels are far removed from danger zones. What role did the region’s fiscal behavior exert on its economic turnaround? While there is no definitive answer, most accounts suggest that state–local governments responded to economic misfortunes with a successful blend of measured prudence and bold innovation. Excessive debt, which might have impeded recovery, was largely avoided. Governments were sufficiently aggressive in cushioning personal hardships and maintaining investment in education and infrastructure, while designing programs to regenerate growth and development.

The relatively healthy fiscal condition of the Midwest’s governments has allowed them some room to reconsider their tax and spending policies. Such reconsideration seems all the more appropriate, given the federal government’s efforts to devolve responsibility to the states in many service areas, such as labor training and social welfare. Midwest state governments have been at the forefront in crafting new forms for delivering social services and in nudging the federal government to transfer authority for such services to the states. In some cases, the transfer requires that state–local revenues grow sufficiently to meet added service provision responsibilities, thereby putting a premium on the efficiency and equity of state revenue structures. Accordingly, state–local governments continue to examine their tax structures and policies, with an eye to the implications for continued growth and development.

There are two types of tax policies being used by state and local governments to boost or maintain growth, development, or economic well-being. The first is selective tax abatements and special services, awarded to industries and, more commonly, to individual firms, which have been proliferating over the past 30–40 years. The second is a general tax structure that will encourage and not unduly inhibit development.

There are not many analysts or observers who believe that subnational tax and spending policies exert a great deal of influence on investment location decisions. Both site-relocation firms and academic analysts point to other issues, such as quality of life and quality of labor force, as paramount to new firms and expanding businesses. Nonetheless, subnational governments continue to search for and experiment with tax and spending policies that they hope will boost growth and well-being in their communities. While it is true that land, labor, and access to markets overwhelm tax considerations, subnational governments have a lot more control over their own fiscal policies than over these other investment considerations. Furthermore, evidence from state boundary communities, where taxes and regulations differ while other factors are the same, suggests that fiscal policies can play a significant role in the location of employment and investment.

Many of the points of contention arise when subnational governments appear to become *too* mindful of the development implications of their actions. While analysts and experts may have a measured idea of the influence of taxes on development, policymakers and elected officials may instead act on the *perceptions* of the voting public who, in turn, tend to overstate the efficacy of tax policy. As a result, subnational governments are often accused of being overzealous in bidding down general taxes on business or, more commonly, in granting selective abatements to individual, and perhaps highly visible, companies. Observers such as Courant believe that the public is often misled into viewing the rewards of development programs in terms of often-reported jobs *created*. Because immediate job effects associated with development programs are often illusory or offset by attendant job losses, Courant recommended that a more general measure, such as the general welfare used in cost-benefit analysis, be used to evaluate development programs. Some workshop participants argued that sunshine laws requiring states to disclose better information would allow more credible program evaluations of selective abatement-type tax policies.

*Over the past 40 to 50 years, state-local spending has shifted away from basic infrastructure toward health, education, and welfare.*

Other observers, including Burstein and Rolnick, believe that subnational governments are overzealous because, despite the costs and risks, the competitive nature of the economic development game prevents them from exercising unilateral restraint; to do so invites economic decay. Mutual compacts among states to forego the use of selective abatements have not worked. Burstein and Rolnick proposed that subnational governments should be restricted in their ability to use selective abatements. Otherwise, abatements that are effective in influencing investment decisions are likely to damage national economic productivity by relocating firms to locales to which they are not physically suited.

Defenders of selective abatement policy argue that the very *selectiveness* of such tax incentives can be a virtue. For example, Bartik argued that those communities experiencing intransigent unemployment (or underemployment) can use tax abatements to employ local residents. Toft pointed out that selective abatements can be used, not to create distortions favoring selected firms and industries, but to overcome existing distortions and deficiencies in the tax code which stifle particular industry sectors. The alternative—correcting the existing tax code—is often politically unworkable. Toft suggested that selective abatements can also be used to foster industry clusters—groups of related firms in close geographic proximity that can benefit states by creating higher multiplier effects in the local economy. However, further research is needed to establish whether industry clusters offer the benefits often ascribed to them and whether abatements are necessary to encourage their development.

Preliminary evidence from research by Peters and Fisher suggests that states and localities experiencing soft labor markets in the recent past have not shown any greater tendency to use tax incentives. Further study is needed to corroborate their results and further refine measures of local labor market conditions and terms of employment. Similarly, it may be premature to propose the use of tax incentives as a *second-best policy* tool to correct a distorted tax code. What particular features of the political landscape would prevent a *first-best* solution—an evenhanded and neutral tax climate?

Addressing the need for a general tax code that is neutral and even handed, Oakland and Testa and Kitchen proposed a state-local tax system in accord with the benefit principle. Business taxation should be imposed in a neutral way on business investment, and government spending for business services should be thought of as a *fifth factor of production*. Business should be taxed in proportion to state-local spending on services provided to business, such as transportation, public safety, and fire protection. A general tax on the value added of the business sector by place of origin is one approach. In this way, goods produced by the business sector would be priced to include the cost of government services. More importantly, there would be a dialog between the electorate and the government on delivery of services valued by business, allowing government to play its proper and vital role in state-local growth.

Further research is needed to evaluate these recommendations. As Eberts noted, the benefits accruing to individual firms and industries are not so easily discerned as their tax liability. Accurately recording the externalities associated with many state-local government services is often a difficult task. In the meantime, state-local governments will need to look beyond tax policy to the composition of their spending. Over the past 40 to 50 years, state-local spending has shifted away from basic infrastructure toward health, education, and welfare. At the same time, studies of the relationship between infrastructure spending and regional growth initially suggested very significant stimulative effects. Recent studies have shown more modest, yet still significant, contributions from infrastructure spending to business cost reductions and productivity. One such study suggests that highway spending may be particularly important to industries concentrated in the Midwest, such as steel and motor vehicles. Still, the wide range of results to date implies the need for additional research if accurate policy recommendations are to be made.

---

## About the Workshop

Correspondence related to the July 17 workshop should be directed to conference coordinator, William A. Testa, assistant vice president in the Research Department at the Federal Reserve Bank of Chicago. This workshop summary was written by April M. Franco and Richard H. Mattoon. Participants in the workshop included the following:

<b>Bob Ady*</b> PHH Fantus	<b>Randy Eberts*</b> Upjohn Institute	<b>William Lilley*</b> InContext Inc.	<b>Art Rolnick*</b> Federal Reserve Bank of Minneapolis
<b>Jean Allard</b> Sonnenschein Nath & Rosenthal	<b>William Fox*</b> University of Tennessee	<b>Susan Lawler</b> Commercial Club of Chicago/FRAC	<b>Bob Tannenwald*</b> Federal Reserve Bank of Boston
<b>MarySue Barrett</b> Metropolitan Planning Council	<b>April Franco</b> University of Rochester	<b>John McDonald</b> University of Illinois– Chicago	<b>Graham Toft*</b> Indiana Economic Development Council
<b>Tim Bartik*</b> Upjohn Institute	<b>Fred Giertz</b> University of Illinois	<b>Therese McGuire*</b> University of Illinois– Chicago	<b>Laura Tomaka</b> Council of State Government
<b>Myer Blank</b> The Civic Federation	<b>Todd Gabe</b> Ohio State University	<b>Rich Melcher</b> <i>Business Week</i>	<b>Joan Walters</b> State of Illinois
<b>Charles Bonser</b> Indiana University	<b>Robert Ginsburg</b> Midwest Center for Labor Research	<b>David Merriman</b> Loyola University	<b>Samantha Weinstein</b> Woodstock Institute
<b>Eng Braun</b> State of Wisconsin	<b>Don Haider</b> Northwestern University	<b>Susan Moeser</b> University of Wisconsin	<b>Federal Reserve Bank of Chicago</b> Linda Aguilar David Allardice Francesca Eugeni William C. Hunter* Rick Kaglic Thomas Klier Richard Mattoon* Michael Moskow Michael Prager Michael Singer William Testa* Alex Urbina
<b>Mark Buhler</b> State of Wisconsin	<b>John Hamilton</b> DCCA	<b>Lee Munnich</b> University of Minnesota	
<b>Mel Burstein*</b> Federal Reserve Bank of Minneapolis	<b>Jackie Harder</b> Cook County	<b>William Oakland*</b> Tulane University	
<b>Paul N. Courant*</b> University of Michigan	<b>Mark Haas</b> Michigan Dept. of Treasury	<b>Craig Olson</b> University of Wisconsin	
<b>Natalia Davila</b> Chicago Manufacturing Center	<b>Thomas J. Holmes*</b> University of Minnesota	<b>James Papke*</b> Purdue University	
<b>Larry DeBoer</b> Purdue University	<b>Elmer Johnson</b> Kirkland & Ellis	<b>Ronald Patten</b> DePaul University	
<b>Larry DeFranco</b> InContext Inc.	<b>Harry Kitchen*</b> Trent University	<b>Mike Peddle</b> Northern Illinois University	
<b>Murry DePillars</b> Chicago State University	<b>Mike Kolsch</b> State of Illinois	<b>Alan Peters*</b> University of Iowa	<i>* Presenter, discussant, or moderator</i>
	<b>Joni Leithe</b> Government Finance Review	<b>Tom Pogue</b> University of Iowa	
	<b>Myrt Levin</b> Iowa Business Council		

Single copies of this summary are available free of charge. Please send requests for single copies and multiple copies to Public Information Center, Federal Reserve Bank of Chicago, P.O. Box 834, Chicago, Illinois 60690-0834 or telephone (312) 322-5111. This publication has different content than the printed version.

---

## **Workshop Agenda**

The workshop “Designing State–Local Fiscal Policy for Growth and Development” was held on July 17, 1996, at the Federal Reserve Bank of Chicago, 230 S. LaSalle St., Chicago, IL 60604.

### **I. Opening Remarks**

*William A. Testa, Federal Reserve Bank of Chicago*

### **II. An Overview of Midwest Tax Climate and Fiscal Position**

*Richard H. Mattoon, Federal Reserve Bank of Chicago*

### **III. Do State Policies Matter?**

Regional Fiscal Policies: Overview and Issues

*William F. Fox, University of Tennessee*

Interjurisdictional Business Tax-Cost Differentials in the Midwest

*James Papke, Purdue University*

Impacts of Retail Taxes on the Illinois–Indiana Border

*Lawrence DeFranco and William Liley, InContext Inc.*

The Effects of State Policies on the Location of Industry: Evidence from State Borders

*Thomas J. Holmes, Federal Reserve Bank of Minneapolis and University of Minnesota*

A View from Business

*Bob Ady, PHH Fantus*

### **IV. Do Politicians Structure Taxes to Encourage Growth?**

Industrial Incentives: The Pattern of Competition Among U.S. States and Cities  
*Peter S. Fisher and Alan H. Peters, University of Iowa*

Observations from State Tax Commission Studies

1. *Bob Tannenwald, Federal Reserve Bank of Boston*
2. *Therese McGuire, University of Illinois Institute of Government and Public Affairs*

### **V. How Would You Know a Good Economic Development Policy If You Tripped Over One?**

*Paul N. Courant, University of Michigan*

### **VI. Is There a Role for Regional Tax Policy?**

A Proposal to Prohibit Selective Abatements

*Art Rolnick and Mel Burstein, Federal Reserve Bank of Minneapolis*

Prescriptions for Incentive Policy

*Tim Bartik, UpJohn University*

Indiana’s Use of Abatements

*Graham Toft, Indiana Economic Development Council*

Open Discussion

### **VII. Business Services and Infrastructure**

State-Local Taxation and the Benefits Principle

*William H. Oakland, Tulane University*

*William A. Testa, Federal Reserve Bank of Chicago*

Subnational Business Taxation and Business Services in Canada

*Harry M. Kitchen and Enid Slack, Trent University*

An Update on Growth-Infrastructure Studies, and Preliminary Data on the Stock of Midwest Infrastructure

*Randy Eberts, Upjohn Institute*

Open Discussion

---

### **About the Project**

The Federal Reserve Bank of Chicago is undertaking an extensive analysis of the Midwest economy. The goal of the project is to understand the Midwest's turnaround in economic performance since the early 1980s. In the Seventh Federal Reserve District—which includes Iowa and large portions of Illinois, Indiana, Michigan, and Wisconsin—unemployment rates are, at the time of this writing, lower than at any time since the 1977–78 period, as well as being below the national average.

The Midwest project will involve a series of workshops and research studies which will be carried out by Federal Reserve analysts and other researchers from the region. An advisory board representing a cross-section of Midwest leaders will provide guidance for the project (see back page). Workshops scheduled for 1996 will consider (1) the economic performance of the broad Midwest economy and the transformation of its manufacturing industries; (2) the rural economy of the Midwest; (3) labor force training and education; (4) global linkages with the region's economy; and (5) tax, spending, and regulatory influences on regional performance. The findings of the workshops will be communicated through a series of publications and broad public forums. The project will conclude with a conference and publication toward the end of 1996.

At the Bank, the "Assessing the Midwest Economy" project is being conducted through a cooperative effort of the Office of the President, Michael H. Moskow, president; Research Department, William C. Hunter, senior vice president and director of research; and Community and Information Services, Nancy M. Goodman, senior vice president.

Inquiries should be directed to William A. Testa, senior economist and assistant vice president, Research Department, or James Holland, public affairs officer.

## ADVISORY BOARD

### Honorary Members

**The Honorable James Edgar**  
*Governor*  
State of Illinois

**The Honorable Evan Bayh III**  
*Governor*  
State of Indiana

**The Honorable John M. Engler**  
*Governor*  
State of Michigan

**The Honorable Tommy G. Thompson**  
*Governor*  
State of Wisconsin

**The Honorable Terry E. Branstad**  
*Governor*  
State of Iowa

### Members

**Michael Aiken**  
*Chancellor*  
University of Illinois at Urbana-Champaign

**Jean Allard**  
*Of Counsel*  
Sonnenschein Nath & Rosenthal

**David Allardice**  
*Senior Vice President and Branch Manager*  
Federal Reserve Bank of Chicago  
Detroit Branch

**James Annable**  
*Senior Vice President and Chief Economist*  
First National Bank of Chicago

**James Barrett**  
*President*  
Michigan Chamber of Commerce

**MarySue Barrett**  
*President*  
Metropolitan Planning Council

**Henry S. Bienen**  
*President*  
Northwestern University

**Charles Bonser**  
*Director*  
Institute for Development Strategies  
Indiana University at Bloomington

**Myles Brand**  
*President*  
Indiana University

**David Broski**  
*Chancellor*  
University of Illinois at Chicago

**James Buchen**  
*Vice President*  
Wisconsin Manufacturers and Commerce

**Mark Bugher**  
*Secretary*  
Wisconsin Department of Revenue

**Malcolm Bush**  
*President*  
The Woodstock Institute

**Mary Sue Coleman**  
*President*  
University of Iowa

**Paul Courant**  
*Chair*  
Department of Economics  
University of Michigan at Ann Arbor

**Dolores Cross**  
*President*  
Chicago State University

**Katherine Davis**  
*Budget Director*  
State of Indiana

**Mike Donohue**  
*Executive Director*  
Great Lakes Commission

**Randall Eberts**  
*Executive Director*  
Upjohn Institute

**Peter Eisinger**  
*Professor*  
Robert M. La Follette Institute of Public Affairs  
University of Wisconsin-Madison

**Donald Hanson**  
*Program Director*  
Energy and Environmental Policy  
Argonne National Laboratory

**Jacquelyn Harder**  
*Director of Economic Development*  
Cook County Board of Commissioners

**Geoffrey Hewings**  
*Professor*  
Department of Geography  
University of Illinois at Urbana-Champaign

**John W. Hogge**  
*Vice Chairman*  
Civic Federation

**Sally Jackson**  
*President and Chief Executive Officer*  
Illinois State Chamber of Commerce

**Elmer Johnson**  
*Partner*  
Kirkland & Ellis

**Stanley Johnson**  
*Director*  
Center for Agricultural and Rural Development  
Iowa State University

**George Kuper**  
*President and Chief Executive Officer*  
Council of Great Lakes Industries

**Christopher LaMothe**  
*President and Chief Executive Officer*  
Indiana State Chamber of Commerce

**Myrt Levin**  
*Executive Director*  
Iowa Business Council

**Lee Munnich**  
*Senior Fellow and Director of the State and Local Policy Program*  
Hubert H. Humphrey Institute of Public Affairs  
University of Minnesota

**Richard Munson**  
*Executive Director*  
Northeast-Midwest Institute

**Ronald Patten**  
*Dean*  
College of Commerce  
DePaul University

**Douglas Roberts**  
*Treasurer*  
State of Michigan

**Howard Roth**  
*Vice President and Manager*  
Bank of America

**Ron Shaffer**  
*Director*  
Center for Community Economic Studies  
University of Wisconsin-Madison

**Mary Sheehy**  
*Executive Director*  
Council of Great Lakes Governors

**Don Smith**  
*Director*  
Center for Economic Development  
Carnegie Mellon University

**Hugo Sonnenschein**  
*President*  
University of Chicago

**Dan Swinny**  
*Executive Director*  
Midwest Center for Labor Research

**Gretchen Tegeler**  
*Director*  
Iowa Department of Management

**Stephen Thorp**  
*Transportation and Economic Development Program Director*  
Great Lakes Commission

**Graham Toft**  
*President*  
Indiana Economic Development Council

**Don Turner**  
*President*  
Chicago Federation of Labor and Industrial Union Council AFL-CIO

**Joan Walters**  
*Director*  
Illinois Bureau of the Budget

**Arnold Weber**  
*President*  
Civic Committee of the Commercial Club of Chicago