

**Tax and Fiscal Policy in the New Economy:
What Wisconsin Can Learn from Other State Models**

**A White Paper
Submitted for the
Wisconsin Economic Summit
November 29 – December 1, 2000**

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“Silicon Valley is the only place on Earth not trying to figure out how to become Silicon Valley.”¹

That quote captures both the aspirations of Wisconsin and the conundrum the state faces as it examines how to find its niche in the New Economy. Every state’s mouth waters at the thought of being at the heart of economic transformation. It means growth, jobs, wealth, prosperity, and an ever-expanding tax base. What can state government do to propel its economic structure to this cherished level? Were it only a case of waving a magic policy wand.

For the truth is that state tax and fiscal policies appear to be limited in their influence in creating such centers of innovation as Silicon Valley, Route 128 in Boston, or the North Carolina Research Triangle. If these economic hotbeds in any way were the result of government, the stimulus was federal funds for defense and research that provided needed fuel, not state money or other state policies, particularly in the case of Silicon Valley and Route 128.²

Nevertheless, a state policy of “do nothing” is almost a certain guarantee of the status quo. This paper looks at Wisconsin and examines what other states are doing in terms of tax and fiscal policies to promote the growth of a New Economy infrastructure within their borders and what might be considered models for Wisconsin to consider. We use the term “models” rather than “best practices” because many of these state policies fall in the realm of “catch up.” They are interesting and innovative, but do not possess the track record, both in longevity and occurrence, to be completely proven examples of success. With time some of these policies might prove to be the fertilizer, if not the true seeds of new economic growth. Wisconsin’s goal should be to create the infrastructure and atmosphere that allows the New Economy to grow. Within their limitations, state tax and fiscal policies can assist that effort.

¹ Robert Metcalfe, in *InfoWorld*, March 2, 1998, as found in “View from Internet Valley,” www.internetvalley.com/

² Paul Macken, “Silicon Valley and Route 128: Two Faces of the American Technopolis,” www.internetvalley.com/archives/mirrors/sv&128.html

The State of Wisconsin in the New Economy

Wisconsin was once labeled the “Star of the Snow Belt” by the *Wall Street Journal*. Wisconsin was a star of the old economy due to its reputation for heavy manufacturing. It had a motivated, low to moderately skilled workforce that meshed well with manufacturing mass production. The state had tax policies, such as the exemption for machinery and equipment, that encouraged retention and expansion of existing manufacturing at the least, and attracted new ones at the best. But that was then and now is now.

That is not to suggest that the old economy is dead and unimportant today. Wisconsin is prosperous. Manufacturing remains a vital segment of the economy. Unemployment is extremely low. There is a worker shortage both in skills and numbers. The *Development Report Card for the States*, a broad economic development index issued annually by the nonprofit Corporation for Enterprise Development, gives Wisconsin relatively high marks in its 2000 report. The state was graded A in performance. Only three states generated jobs faster than Wisconsin during the reporting year. The state received a C in business vitality. While it ranked low in the total number of new companies formed, it was adding companies at a higher rate than every state except West Virginia. The state earned a B in development capacity, with a strong ranking in educational achievement, but low grades in highway improvements and private lending to small businesses.

But as the case statement for this Economic Summit implies, Wisconsin, for all its current strengths, is behind the curve in the transition to the New or Knowledge Economy. Personal income remains below the national average—a reflection of the kinds of jobs available in Wisconsin. The robust venture capital associated with New Economy growth is lacking. Of the approximately 675 venture capital funds listed nationally by PriceWaterhouseCoopers’ *Money Tree Survey*, only six are from Wisconsin. Wisconsin ranks 32nd of 50 states in the *State New Economy Index*, created by the Progressive Policy Institute of Washington, D.C. Massachusetts, California and Colorado are rated the top three.

What is the New Economy and what does Wisconsin have to do to ascend to the level of Massachusetts, California and Colorado? More to the point, in its own region, how does Wisconsin draw closer to its peer neighboring states, Minnesota and Illinois, ranked 14th and 22nd respectively, and remain ahead of Michigan, Indiana, and Iowa, ranked 34th, 37th, and 42nd respectively?

What is the New Economy? According to the Progressive Policy Institute, “It is a knowledge and idea-based economy where the keys to wealth and job creation are the extent to which ideas, innovation, and technology are embedded in all sectors of the economy.” In other words, the New Economy is not just industry specific, but involves a technology-based process adaptable to a broad spectrum of business sectors. You can find the New Economy in old-line manufacturing as well as in dot-com start-ups. Consider, for a moment, old economic development goals such as adequate highways and rail lines, accessible air and seaports, affordable energy and water utilities, a skilled labor force, wide-open spaces for business expansion, and plentiful raw materials. The New Economy requires analogous development: comprehensive networks of cable and wire communication lines, effortless Internet access, reliable energy supplies, hi-tech workers, accessible equity and debt capital for business growth, and unlimited new ideas, new research, and new technologies.

It is beyond the purview of this paper to look at all the ways that state government might assist the transition to a knowledge-based economy in Wisconsin. For instance, the combinations and permutations possible in dealing with the five categories of the Progressive Policy Institute's *Index* could fill several books. Our charge is to examine the tax and fiscal models in other states in order to learn what might be helpful to Wisconsin, either in terms of new approaches or in fine-tuning existing policies. These models might range from outright budget allocations to new sources of tax revenue to tax incentives aimed at promoting certain economic behavior. But as we stated earlier, the ultimate goal of state government in this arena should be to provide the infrastructure and atmosphere to make the New Economy flourish.

Policymakers should understand that there are no silver bullets here, no magic wands. If anything, caution should rule as to the results or outcomes to be gained or expected through either fiscal or tax policies. In a 1996 report, the Federal Reserve Bank of Chicago examined *Designing State-Local Fiscal Policy for Growth and Development* as part of a series of studies on "Assessing the Midwest Economy – Looking Back for the Future." The report concluded, "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." Instead, there are "other issues, such as quality of life and quality of labor force" that are more "paramount to new firms and expanding businesses." The report then cautioned, "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."

These findings were revisited in a more focused study this year for the state of Virginia on research and development tax incentives. The report noted, "Twenty-one states currently provide R&D tax credits. In terms of the actual effectiveness of these state-level tax incentives in bringing in R&D dollars, though, there appears to be little more than anecdotal evidence." The Virginia report then fell into the pattern described by the Chicago Fed. It went on to state, "Few policymakers or practitioners argue, however, that a comprehensive state policy towards promoting high-tech growth could exist and be well perceived without a meaningful R&D tax incentive component. ...[T]he inherent weaknesses in current federal and many other states' incentives do not have to be repeated in future Virginia initiatives."

Competition or perceived competition can drive state decisions on tax and fiscal policy. Research referred to in the Chicago Fed report indicated that "the forces of competition or copycat behavior have tended to equalize levels of taxation" in the Great Lakes region. A Federal Reserve Bank of Boston official, cited in the Chicago Fed report, observed that "policymakers believe that taxes matter regardless of the evidence."

A recent example of that is illustrated by Wisconsin's decision to exempt computer hardware and software from the business personal property tax in its effort to promote the growth of the business services sector, the fastest growing sector in the state economy and the New Economy. One of the concerns was that neighboring states, which did not tax such equipment, would put Wisconsin at a disadvantage in retaining, growing and attracting business services to the state. A survey conducted at the time by the Public Policy Forum of Wisconsin business service firms indicated the kinds of firms most vulnerable to lost income because of the personal property tax were companies that did at least 20% of their sales outside Wisconsin; those with fewer than 25 employees; firms that had done business in the state for less than 10 years, and businesses in consulting, architecture, computer, construction and engineering. That profile fits young, small, knowledge-based firms.

What Can Wisconsin Learn from Other States?

One conclusion stated in the Chicago Fed report suggested, “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.” What can Wisconsin learn from how other states are devoting resources to facilitate New Economic development? At this point in time, there is no proven blueprint for success. Most states are similarly situated to Wisconsin or have only recently implemented new policies or legislative initiatives.

Some states have begun the policymaking process by formally taking stock of their economic situation by inventorying their assets, evaluating their current infrastructure, and identifying their needs for the future. Two such studies are particularly well devised.

In Ohio a statewide leadership effort measured the state’s readiness for global electronic commerce and became the first state to comprehensively benchmark its digital economy. The ECom-Ohio initiative used benchmarks established by the Computer Systems Policy Project³ in 1998 to assess readiness on 22 key indicators. The categories of indicators were: 1) infrastructure, 2) access to critical services, 3) citizens online, 4) businesses online, 5) government online, and 6) plans for community growth. The initiative had four outcome goals: 1) to identify gaps in information infrastructure and utilization, 2) to build state and regional action agendas to boost Ohio’s digital economy, 3) to compare regional performance in terms of capacity, access, and use of infrastructure, and 4) to measure progress on achieving New Economy goals. ECom-Ohio released its *Guide to Ohio’s Electronic Commerce Readiness* in May 2000. The project was underwritten as a public-private effort supported by the Ohio Department of Development with \$150,000 per year for three years and by 22 Ohio industry leaders, who each gave \$20,000 per year for three years. The research was conducted under the advice of a statewide steering committee of government, university, and industry representatives and housed at the Ohio Supercomputer Center (OSC), a shared statewide academic resource, in conjunction with the OSC’s Technology Policy Group.

The Morrison Institute for Public Policy at the Arizona State University undertook a similar, but more policy-oriented, effort for the state of Arizona. The Institute published a report entitled, *The New Economy: A Guide for Arizona*, in October 1999 and a follow-up report, *The New Economy: Policy Choices for Arizona*, in January 2000. The first report measured Arizona’s place in the New Economy and presented some examples of policies in other states that the authors felt were relevant responses to the New Economy. Once the *Guide* was released, the Morrison Institute asked Arizona’s citizens and business, non-profit, and education communities to respond by suggesting visionary policy options for the state. To facilitate the process, the Institute distributed *Participate in the New Economy* packets to all segments of Arizona society. The suggestions that resulted were compiled in the follow-up report, which the Institute formally presented to Arizona’s policymakers in January 2000. The report’s policy choices were categorized as follows: 1) Research and Development—invest in academics, promote private R&D, encourage New Economy start-ups, 2) Venture Capital—diversify the state’s hi-tech base, use state pension fund dollars for venture investment, 3) Workforce Development—continue K-12 improvements, increase scholarships and financial help, offer worker training tax credits, 4) Using Technology

³ The CSPP is a coalition of chief executive officers from 10 of America’s leading information technology companies, who fund the coalition’s work. The CSPP Guide to Global Electronic Commerce Readiness is a matrix of 22 categories of readiness, which are each evaluated across four degrees of readiness, or benchmarks.

Wisely—foster access and technology use, add technology transfer to university missions, transition all businesses to New Economy, 5) Strategic Alliances for Competitive Advantage—support cluster organizations, create cyberdistricts, reinforce regional alliances, and 6) Quality of Place—be honest about the state’s assets, invest in quality of life, be fast and flexible in decisionmaking. The efforts by the Morrison Institute have resulted in Arizona Governor Jane Hull appointing an Arizona Partnership for the New Economy to recommend a New Economy agenda for the state.⁴

Once Wisconsin’s readiness has been formally evaluated, it will be time for making the hard policy choices. The decisions made by other states can be helpful by illustrating the policy issues to be resolved, by delineating the available policy choices, or by providing a basis from which modifications can be made to suit Wisconsin. This paper focuses on the practices of other states when making fiscal and tax policy decisions intended to support a New Economy infrastructure.

I. Fiscal Policy in Other States

Fiscal policy can be broadly defined as any state funds spent in support of economic development, including education, transportation, workforce development, or business development. Because many of these areas will be discussed in other white papers at this summit, we have chosen to focus on business development policies.

When it comes to state capital investment in business development, there are fundamentally two options from which Wisconsin can choose: 1) direct investment to replace private investment that a Wisconsin business would otherwise not be able to obtain, or 2) co-investment aimed at leveraging private investment within the state.

A. Direct State Investment to Grow a Sector or Fill a Gap

Direct investment of this sort has lost favor among states, as most policymakers now prefer to let the market dictate where growth should occur. These types of fiscal policies were more common in the 1980’s and early 1990’s and are remnants of old economy policies. As a matter of fact, none of the studies of capital development policy that we reviewed identify state models that lack a private investment component as a “best practice.” Indeed, a recent report on state venture capital practices published by the National Governor’s Association identified the extent to which a state program is designed to mobilize private resources as a benchmark criteria for evaluating the program’s effectiveness.

Wisconsin’s Technology Development Fund (TDF) is an example of state direct investment that does not require private co-investment. The TDF provides low interest loans to Wisconsin businesses or research consortiums conducting R&D that: 1) will lead to new or significantly improved products or processes, 2) have a high probability of commercial success within a relatively short period of time (2-3 years), and 3) will provide significant economic benefit to Wisconsin. If the new product or process is successfully commercialized, repayment of the loan is required, typically at 4 percent interest amortized over 5 to 7 years. If the product is not commercially viable, the loan may be forgiven. Between 1984 and 2000, more than 78 TDF loans were awarded for a total of \$11 million in state investment.

⁴ The Partnership was broken into five “hot teams,” which each issued a paper designed to “stimulate discussion by the Partnership and to encourage breakthrough thinking about bold steps that Arizona can take to become a leader in the New Economy.” As of Nov. 1, 2000 the Partnership had not released a comprehensive report.

The TDF has been a vehicle for generating state investment for over 15 years; only small changes would be needed for it to generate private investment as well. In addition, the aim of the program could be modified to focus on high technology innovations. Wisconsin should seize the opportunity presented by this existing program and make the necessary changes to help grow a private venture capital industry.

B. State Investment to Leverage Private Investment

Nearly without exception, state capital investment programs now require at least some co-investment by private investors. Many programs have an explicit goal of attracting private investment to the state. By doing so, not only are these programs creating a culture of private venture investment, they are also creating an environment of risk-taking—which is an essential ingredient for New Economic growth.

As the National Governor's Association found, the best state venture capital programs treat the state as a valued financial partner, one that is exposed to risk and compensated with a proportionate opportunity for return. But it is also important for policymakers to be aware that the interests of the state's various constituents may not always be in sync. While the state may be hoping to encourage business growth through low-cost access to capital, the investment community may see these programs not as opportunity for co-investment, but as competition.

Co-investment programs can take many forms. At one end of the spectrum is a program of direct state investment in individual firms that merely requires the firms to also find private investors. At the other end of the spectrum are programs that encourage private investment but do not put any state funds upfront. Somewhere in the middle lie programs in which the state is a true partner with private investors, either by forming a public/private venture company or by investing state money in privately-managed venture funds. Several examples along this spectrum are discussed below:

- Maryland's Enterprise Investment Fund (EIF): Maryland's EIF program is an example of direct state investment in individual firms with a requirement that the firms obtain private investment as well. The Maryland legislature created the EIF in 1993 to make second or third round direct equity investments in emerging technology firms.

In general, EIF invests in biotechnology and information and computer technology companies. Other sectors that receive funding include telecommunications, environmental services, aerospace, health services, manufacturing, and life sciences. Investments are made based on the potential for returns, the promotion of economic development, and the creation of jobs. All firms must have a marketable, patented or proprietary product or manufacturing process, a sales force, and a marketing strategy in place. In addition, firms must agree to remain in Maryland for at least five years.

EIF investments range from \$150,000 to \$500,000, with a required 3-to-1 match in private investment. The state takes an equity position, limited to 25 percent of the total ownership, with a maximum term of 15 years, although the aim is to liquidate most investments within seven years. Any returns on the investment are returned to the fund to be reinvested.

The \$12.5 million invested between 1993 and 1999 in EIF and its companion program, the Challenge Investment Program (CIP), grew to a total value of \$45 million. So far the EIF has closed six investments totaling \$2,200,000, which returned to the program. In addition, some revenue from interest and royalty payments has been received. As of 1997, the EIF had invested

in 18 companies that employed a total of 600 people. In addition, these companies were able to match their EIF funds with \$140 million from private investors.

- Massachusetts Technology Development Corporation's Traditional Fund: Further along the spectrum is a Massachusetts program that helps high-risk companies obtain private capital. The Technology Development Corporation (MTDC) was established by the Massachusetts legislature in 1978 as a state-sponsored venture capital company. Although initially started with a federal grant, between 1982 and 1988 the state appropriated a total of \$4.2 million to the MTDC. Since 1988 the corporation has been entirely self-supported. The MTDC operates two investment programs, but we focus on what is known as the Traditional Investment Fund.

The Fund invests only in companies that: 1) are located in, or agree to locate in, Massachusetts, 2) are technology-based and sufficiently innovative to provide a competitive advantage, 3) will result in significant employment growth, 4) can demonstrate difficulty in obtaining private investment or securing investments on terms that would make the company successful, and 5) have the potential for high returns. In addition, investments are only made in firms that have proprietary technology-based products, and are not made in biotech companies because the Fund is not large enough to meet the significant capital needs of those types of start-ups.

All investments are made on a co-venture basis with private venture capitalists, banks, limited partnerships, or corporate investors. Of a total investment of \$1 to \$3 million, the Fund will contribute between \$300,000 and \$500,000, with the balance provided by the private investor. Investments can be made as equity, debt, or a combination of both.

From FY 1980 through FY 1999, MTDC invested \$38 million in 90 companies, with a cumulative average rate of return of 17% per year. In December 1998, investments were held in 55 companies that employed 10,000 people, generating a total annual payroll of \$505 million and total annual state tax revenue of more than \$24.8 million. As of June 1999, the program had leveraged \$221 million in private first-round funding. Another \$266 million in private investments were made in subsequent rounds.

- Colorado Venture Management (CVM) Equity Funds: Another point on the spectrum represents programs that invest state institutional funds in privately-managed venture capital corporations. An example is Colorado's investment in CVM Equity Funds. CVM is a privately-created, privately-managed group of six equity funds specializing in early-stage venture capital in the Rocky Mountain region. CVM has close ties to the University of Colorado and has helped create eight companies commercializing technologies developed on CU's campuses statewide. Colorado has invested state money in two of the four funds that focus on Colorado.

In 1989 the Colorado Housing and Finance Authority committed \$1 million to Fund III as a lead investor. The Colorado Public Employees' Retirement Association matched this with \$1.5 million. The state pension system also later committed \$1.7 million to Fund IV as the lead investor. Colorado's public institutional investors have invested in CVM because it has a focus on Colorado companies and a proven track record. CVM has no legislated mandate or obligation to state institutions other than that it has to any of its stakeholders.

Fund III, started with \$2.5 million in public funds and \$1 million in private money, made seventeen investments and had a total value of \$7.4 million in 1996 when it closed. Fund IV, started with \$1.7 million in state funds closed in 1993 with \$5.2 million, which has now been re-invested in ten new ventures.

- Oklahoma Capital Investment Board Venture Capital Program: At the far end of the capital-development spectrum are programs designed to leverage private capital without spending public funds. The Oklahoma Capital Investment Board (OCIB) was created by the state to mobilize equity investment by supporting the growth of a local venture capital industry. The Venture Capital Program demonstrates the state's philosophy that high risk is necessary in the New Economy, that risk capital is best provided and managed by the private sphere, and that the state should demonstrate a high level of commitment to entrepreneurial ventures.

The OCIB raises debt capital from private institutional investors and banks by providing a guarantee. The OCIB holds \$100 million⁵ in state tax credits and is authorized to sell these credits, if needed, to meet a call on the guarantee. Public Utility companies in Oklahoma have contracted to purchase the credits, thereby effectively making the OCIB's guarantee a utility guarantee.

The OCIB-guaranteed investments are not limited to Oklahoma-focused venture funds, but funds receiving these investments are expected to use their best efforts to invest in local businesses. In addition, the funds must leverage additional private capital in the aggregate at a ratio of at least \$3.8 to every \$1.00 of OCIB-guaranteed capital.

Between 1993 and July 1999 the OCIB had raised and invested nearly \$26 million. Investments are made via a private corporation, the Oklahoma Capital Formation Corporation. The portfolio's internal rate of return exceeds 29%. Eight partnership venture funds received the \$26 million in OCIB-guaranteed investments and, in turn, invested in twelve Oklahoma companies. In addition, the eight partnership funds have invested another \$61.6 million of private capital in these twelve companies, which has resulted in the companies' leveraging of debt capital estimated at about \$123 million. No state funds have been used and no tax credits have been redeemed.

As the above four examples illustrate, Wisconsin has many options for using state funds to encourage growth in local venture capital, including modifying an existing loan program. Wisconsin should consider that, as noted by the National Governor's Association, the most successful programs have four characteristics: 1) Successful programs are those state leaders take the initiative in launching, but then rely on private-sector managers to run day-to-day. The quality of the investment decisions will dictate the success of the fund, and investment decisions are controlled by investment philosophies. 2) States that have investment philosophies that echo those of private investors—an attraction to risk, an understanding of the market, a willingness to co-invest—will be more likely to have an impact. 3) That said, the program itself must be large enough to make a difference. The amount of effort to start and operate a small capital development program is the same as for a large one; successful programs are large enough to be a visible source of capital for would-be local entrepreneurs. 4) And, as mentioned, direct state investment in new businesses is less effective than state investment aimed at leveraging private venture and seed capital.

Wisconsin should start by analyzing its investment strategy for its large, institutional investors such as pension funds and development authorities. The State of Wisconsin Investment Board (SWIB) recently implemented a Biotech/High Tech Initiative to provide venture capital for Wisconsin firms. SWIB selected two Wisconsin venture funds for investment that have demonstrated commitments to the healthcare/biotech industry, a willingness to invest at least 75% to 80% of SWIB's allocation to Wisconsin companies, and relationships with technology transfer

⁵ The OCIB initially held \$50 million in tax credits, but during the 2000 legislative session another \$50 million were appropriated.

organizations such as the Wisconsin Alumni Research Foundation. SWIB currently has committed up to \$20 million to the Madison-based Venture Investors group and up to \$20 million to Mason Wells, based in Milwaukee. Another \$5 million could go to Mason Wells earmarked for biomedical investments.

The Initiative was originally conceived as having a specific biotech focus and the State continues to express a preference for biotech start-ups. However, several venture capital firms, in response, have noted that the narrow technological focus can inhibit a venture fund's ability to invest primarily in Wisconsin. SWIB has so far been responsive to these concerns and has not restricted its investments only to biotech. SWIB should continue to follow the market's lead, eventually making investments on technologically-neutral criteria.

SWIB's current investments in the high tech venture market, at the very least, send a signal that Wisconsin is willing to become a player in the New Economy. But the state should also consider implementing a program specifically aimed at increasing the pool of private venture capital available in the state. Of the four such types of programs discussed above, Oklahoma's guarantee program is the most intriguing. For a state that once had virtually no venture investment activity, the program has attracted major sources of capital for Oklahoma companies. And, so far, all at no cost to the state. The guarantee helps transfer some of the risk of venture capital investing from the private investors and onto the state—a good way to enable the initial growth of what may eventually become a culture of high-risk private investing within the state.

The Oklahoma program also illustrates another method for encouraging New Economic development: The use of tax policy to stimulate growth. However, as will be discussed below, a state must be cautious when modifying tax policies for this effect.

II. Tax Policy in Other States

Lawmakers have manipulated tax policies to encourage economic growth since the advent of taxes themselves. But in the New Economy a conflict is brewing—states are creating tax policies to foster electronic commerce and yet, as e-commerce grows, these same tax policies will result in a smaller overall tax base.

A. Tax Incentives

Many states are currently operating under a theory that tax credits can be structured to spur New Economic growth. Unfortunately, the impact of these tax schemes is very hard to measure. The hope is that these tax credits will be incentive for technology development, entrepreneurship, infrastructure building, and/or venture investment.

- **Private Investment:** Directly related to the fiscal policies discussed in the previous section are programs that provide tax credits to private investors based on their capital contributions to high tech companies. For example, Wisconsin's CAPCO program offers insurance companies a premium tax credit of 100% of their investment in a Certified Capital Company (CAPCO). The credits are used at a rate of 10% a year for a ten-year period, but the total investment must have been made at the beginning of the ten-year cycle. CAPCOs must invest in small Wisconsin businesses that are unable to obtain conventional loans or equity investments from commercial banks. Wisconsin appropriated \$50 million in tax credits for this program in 1999; as of May 2000 all available credits had been allocated.

Many other states have CAPCO programs, including Louisiana, Missouri, and New York. Some states make the tax credit transferable, so that the investor can immediately receive the full value of the credit by selling it. Insurance companies are the targeted investor of these programs

because they have large pools of investable capital, traditionally seek long-term investments, and have capable investment staffs with the ability to choose and evaluate appropriate investments.

Other state programs target individual private investors. Ohio's Technology Investment Tax Credit provides individual taxpayers with a credit equal to 25 percent of their investments in qualified technology-based companies, up to a maximum of \$37,500 per investment. Qualified companies are small Ohio businesses that are focused primarily on research and development (R&D), technology transfer, or the application of new technology. The credit must be used in the year it is issued, but if the credit exceeds the taxpayer's taxable income for that year, it may be carried forward for up to fifteen years. The credit is not transferable. Ohio appropriated \$10 million in tax credits for this program. A similar program was recently enacted in Hawaii, which will provide a 10 percent credit on investments in high technology businesses, up to a maximum of \$500,000 per year, per investment. In addition, Hawaii now exempts the gains made by an individual investor who has contributed a minimum of \$1,000 to invest in venture capital for Hawaii businesses.

While popular, tax credits targeting private investors are difficult to evaluate, as it is impossible to know whether these taxpayers would have invested had there not been a tax credit available. Wisconsin should measure the impact of its CAPCO program and based on the results, determine whether more tax credits should be appropriated or whether the costs of the program outweigh its benefits. Originally Wisconsin estimated that the \$50 million in credits would result in \$343 million in additional tax revenues over the ten-year life of the program. Even if Wisconsin's CAPCO program is found to have little or no fiscal impact on private investing, some consideration should be given to the notion that the availability of the credit at the very least sends a message to investors that their infusion of capital is beneficial to the state's economy.

- Infrastructure Building: Tax incentives for strengthening a state's technology infrastructure include credits for R&D purchases and facility building. Wisconsin's new exemption of computer equipment from personal property tax is a good example of a tax incentive aimed at infrastructure building. Wisconsin also provides a tax credit for expenses related to constructing and equipping new research facilities or expanding existing facilities in Wisconsin.

Credits for R&D equipment are not uncommon, but they differ widely among states. California offers a six percent credit for the costs of tangible personal property used for R&D, while Montana assesses R&D assets at a lower rate. In Maryland, machinery, equipment, materials, and supplies that are consumed or used primarily in R&D are eligible for an exemption equal to the assessment on the R&D property that is in excess of 50 percent of the original cost. New York offers several incentives for infrastructure development, including: a seven percent credit for qualified R&D property, an exemption from sales and use tax for energy used or consumed directly and exclusively in R&D, and an exemption from sales and use tax for tangible personal property purchased for, used, or consumed directly and predominately in R&D. Washington exempts equipment and structural spending for R&D if approved before spending occurs.

How effective are these tax incentives? Again, it is tough to judge because it is impossible to know whether these R&D purchases would have been made if the tax credit were not available. But the Public Policy Forum's 1997 survey of business services companies indicates that business equipment taxes are a factor when these companies are deciding where to locate. Nearly 60% of all the companies surveyed felt business equipment taxes were either very or extremely important when making a siting decision. However, 62% of the out-of-state companies surveyed felt that eliminating personal property tax on business furnishings, computers and software would have no impact on their future decisions to invest in Wisconsin.

Wisconsin figures the fiscal impact of its R&D facilities tax credit was \$2.2 million in FY 1998. The computer property tax exemption has an estimated 1999 value of \$2.5 billion, equal to .9% of the statewide taxable property value. The state should attempt to determine whether these incentives helped encourage infrastructure development that would otherwise not have occurred, but, at the very least, Wisconsin should soon be able to measure the economic impact due to new or relocated Wisconsin businesses that took advantage of these incentives.

- Research and Development: Probably the most established tax policy for New Economic development is the R&D tax credit. Twenty-one states, including Wisconsin, currently provide R&D tax credits, most mirroring the federal R&D tax credit. Actual evidence of the effectiveness of these credits is sparse, although each state's credit is generally about one percent or less of total R&D spending in the state. This implies that these credits stem mainly from research that would have been conducted whether or not a tax credit was available, since R&D is very expensive to undertake. Despite this lack of evidence of great impact, policymakers seem to believe an R&D tax credit is a necessary piece of the New Economy policy puzzle. Others argue that direct government funding of basic and applied research would be more efficient and effective than providing companies with a tax credit. However, direct funding of R&D, like direct venture investment, may hamper free market forces.

Wisconsin's R&D tax credit is typical, as compared to the other 17 states that also base their credits on R&D spending. Like Wisconsin, most are incremental credits that apply only to certain research activities conducted within the state. Wisconsin's credit equals five percent of the incremental expenditure over the 1984-88 base expenditure. Wisconsin estimates that the fiscal impact of the R&D credit was \$11.4 million in FY 1998.

Some states, like North Carolina and Oregon, limit their R&D credits to particular types of research or industrial sectors. These limitations are now, in the New Economy, generally seen as less effective since they are attempts to predict where growth will occur or control where growth should be.

Other states, like Mississippi and Vermont, base their credits on R&D employment rather than R&D expenditures. This type of credit may be more helpful to larger companies than cost-based incremental credits like Wisconsin's. That is because it may be difficult for large companies to continually increase R&D costs, as their base starts out quite large in the first place. Smaller, fast-growing companies are likely to benefit from either cost-based or employment-based credits as they grow on both dimensions.

Wisconsin should try to better measure the total amount of R&D spending in the state and the tax credit's impact on that spending. Even if only one dollar of new R&D spending is generated⁶ for every dollar lost in tax revenue, the "spillover" effects, like additional jobs or innovation, could be quite large.

B. Sources of Tax Revenues

Since so little is known about the effectiveness of New Economy tax incentives, it is difficult to prove that they result in overall improvements in a state's economic status or in increases in a state's tax revenue or tax base. This is problematic because the New Economy actually threatens

⁶ A 1995 study by the now-defunct Congressional Office of Technology Assessment concluded that this was the effect of the federal R&D tax credit.

to result in a *smaller* tax base for states. This prediction is based on our current means of assessing corporate income tax, sales and use tax, and communications services.

- Corporate Income Tax: E-commerce affects corporate income taxes because, in general, corporations are taxed based on a geographic apportionment of income. In Wisconsin this is based on a formula incorporating a corporation's property tax value in the state, employment level in the state, and sales volume in the state. Like many other states, sales are double-weighted in Wisconsin's corporate income tax formula (a recent "single-factor" proposal in Wisconsin would have made in-state sales the only factor in determining tax liability). Internet sales and e-commerce raise questions of how such transactions should be attributed to different states, and therefore, how subject the corporation is to income tax in different states.

Internet activity also affects the determination of nexus, or the degree of a corporation's presence in the state, for corporate income tax purposes. The Internet makes it more likely that a business could conduct activity in a state while avoiding establishing nexus in that state (and thereby avoiding corporate income tax liability in that state). The nexus concept is also an issue when taxing sales over the Internet.

Wisconsin can redefine nexus statutorily, but it will be subject to judicial review as it is a construct of constitutional jurisprudence. A better strategy may be to pursue multistate compacts concerning the apportionment of corporate income tax with regard to multistate corporations. As with past attempts to broaden the concept of nexus, the Internet's impact on a corporation's nexus will most likely be decided on a case-by-case basis by the judiciary.

- Sales and Use Tax Policies: The Internet and the New Economy raise three major issues related to the sales and use tax (SUT), namely, how to tax: 1) remote sales, 2) the conversion of tangibles, and 3) business-to-business (B2B) transactions. The U.S. Supreme Court has ruled that a state cannot compel an out-of-state seller to collect sales tax on sales to in-state customers. However, Wisconsin and most other states have use taxes, which in-state customers are supposed to self-report on purchases from out-of-state sellers. These rules require states to, first, make a determination of whether a seller is in fact out-of-state and then to collect use taxes directly from the consumers. Both of these tasks are extremely complicated. But this is not unique to the Internet Age, mail-order and catalogue sales have raised these issues for many years. However, all predictions are for e-commerce and Internet sales to continue their exponential growth for many years to come. The potential impact on a state's SUT base could be quite large if millions, or perhaps billions, of dollars of sales go untaxed.

The conversion of tangibles will also reduce the SUT base because, for most states, the sales tax is assessed only against sales of tangible goods. The Internet now makes it possible to sell intangible goods. Books, music, movies, software, and databases can all be digitized and sold online as pure information without physical form. These sales affect the SUT base because these items were once only available in tangible, and therefore taxable, form.

Finally, the taxation of business services is becoming more of an issue as B2B transactions grow. B2B is expected to be the dominant means of e-commerce in the future. But because in most states the sales tax is, by policy, a consumption tax, these types of service transactions are generally not subject to it. For these states, great growth in service-oriented B2B e-commerce will also result in a shrinking SUT base.

At this point in time, states have not yet taken steps to adopt their SUT policies to the potential adverse effects of New Economy. Several states have, in contrast, adopted tax policies designed

to help grow the New Economy. California, for example, adopted an Internet Tax Freedom Act, which, among other things, clarifies that a seller does not have a sufficient presence in California to establish nexus for sales tax purposes merely by taking online orders from California customers for tangible property. The act also placed a moratorium on local taxes on Internet transactions. Similarly, North Carolina restricted its taxes on Internet purchases to mirror its SUT as it applies to mail-order purchases.

In response to these SUT issues, Wisconsin has joined 30 other states, the National Governors' Association, and the National Conference of State Legislatures in forming the Streamlined Sales Tax Project. The project is a cooperative effort to develop a new, simpler sales tax system that meets the needs of existing and new economies. States joining the project are working on the development of a multistate compact for collaboration on tax collection. The compact could result in one or more of the following: 1) a single or a reduced number of state SUT rates, 2) standardized definitions of products and taxable items, 3) standardized and simplified tax calculation and collection procedures, and 4) exemptions for small sellers. Suggestions have been made for the establishment of third-party tax collection agencies that would figure, collect, and allocate the SUT on Internet purchases to the proper states. In the alternative, the federal government may be asked to perform these functions.

Wisconsin should continue to be a leader in developing a regional or national New Economy sales and use tax policy. By its co-chairing of the Streamlined Sales Tax Project, Wisconsin demonstrates forward-thinking and responsiveness to the new tax revenue issues raised in the New Economy era. This proactive stance should not be limited to SUT issues. Wisconsin also has the opportunity to be a leader on Internet access and telecommunications tax issues as well.

- Internet Access and Telecommunications Taxes: Like the SUT policies discussed above, telecommunications tax policies aimed at bolstering Internet use also represent a potential conflict of interest for states. In this case, it is an issue of tax equity. Currently a federal moratorium exists on new state and local taxes on Internet access, in order to increase the availability of Internet access by encouraging new Internet service providers (ISPs). Most states so far have not objected too fiercely to the moratorium, because most see the lack of an access tax as an incentive for ISPs to locate in their state. However, the moratorium results in voice communication over the Internet not being subject to access taxes, while the same voice communication using the telephone would be subject to such taxes.

Wisconsin has an opportunity to become a leader in resolving this equity problem because Wisconsin had an Internet access tax already in existence when the federal moratorium was passed. Wisconsin is therefore one of only ten states to have any kind of Internet access tax. So, for Wisconsin, the access equity issue is not whether Internet access taxes should exist, but whether the type and rate of access taxes should differ across various telecommunications services. If Wisconsin can successfully establish equitable access taxes for all telecommunications options, then the federal government and other states are likely to follow our lead, as states, lead by the National Conference of State Legislatures, give more recognition to the Internet as a source of new tax revenue. Wisconsin has an opportunity to become the first state to determine how similar communications activities shall be subject to taxes or surcharges regardless of whether the activity was conducted via an Internet service provider, a telephone service provider, or even a cable service provider.

The access equity issue is not unique to the New Economy, but when telephone, cable, and online communication services existed as separate and distinct entities, disparities in tax treatment among them were not as apparent. However, as these technologies have overlapped and become

less distinguishable, tax inconsistencies and fairness issues have become more visible. Furthermore, as the providers of these technologies begin to bundle their services, it becomes even more necessary for a leader to emerge on the equity issue—what surcharges, taxes, franchise fees, etc. are applicable when one company provides WebTV access via the same cable line over which it provides subscription cable television channels? Wisconsin should seize the chance to demonstrate that an equitable solution to this issue can be legislated.

Conclusion

Is Wisconsin behind the curve when it comes to New Economy fiscal and tax policies? While the state may not have high index scores for New Economy readiness or participation, it is not because Wisconsin fiscal and tax policies are completely out-of-date. For nearly every type of practice found in other states, a similar practice can be found in Wisconsin.

But that is not to say these policies and practices should not be revisited with an eye toward even better New Economic performance. For instance, Wisconsin's state government has a strong ranking on digitalizing its services, but state government needs to broaden its vision and support an exercise similar to Ohio's where the state has benchmarked its readiness for the digital economy. Wisconsin should examine a number of approaches reviewed in this paper and revisit its own legislative initiatives to see if there are lessons to be learned from these examples.

When it comes to fiscal and tax policies, Wisconsin should remember the conclusions in the Chicago Federal Reserve report that there is not much hard evidence to demonstrate that such state policies alone have a significant impact on business location decisions. Other factors outside the domain of this paper may have much more influence, such as quality of place, academic environments, and highly skilled workers.

So what is Wisconsin to do? Wisconsin cannot forget the Chicago Fed's other finding that competition among states tends to produce a copycat approach that involves perceptions as well as reality. Thus, not having a strategic fiscal and tax plan similar to other neighboring states would send the wrong message to New Economy participants and might leave Wisconsin behind. As the report noted, "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."

The New Economy is found not in a specific industry or type of corporate entity, but is pervasive across all segments of business, government, and even community-based organizations. Therefore, every current and proposed state fiscal and tax policy has New Economy implications and should be treated as such. The underlying principles that Wisconsin policymakers must keep in mind include concepts such as:

- Readiness—Wisconsin must benchmark its readiness for the New Economy across many infrastructure variables. By assessing items such as Internet usage, bandwidth availability, and business-to-business transactions, for example, our state will have a basis from which planning can be started and progress can be measured.
- Tax neutrality—Tax rates should not be based on the type of technology used by the taxpayer to conduct the taxable activity or transaction. By not specifying a preferred type of technology, government allows the market to develop the most efficient and best technological solutions.
- Tax equity—Tax policies should be the same for brick-and-mortar business as they are for e-businesses. E-commerce will soon be the dominant way to conduct business; favoring e-commerce in local tax schemes only promises to reduce the local tax base.

- Multistate cooperation—New tax policies or changes to existing policies cannot be made in a vacuum; multistate agreements must be pursued to simplify and streamline tax collection and allocation. As geography becomes less relevant for conducting business, states will need to have cooperative mechanisms in place to ensure maximization of appropriate tax revenues.
- Leveraging private investment—State money goes farther when used to leverage more investment from private entities. Using state funds to cultivate a culture of private investment will strengthen the venture capital market and attract investors to the state.
- Minimizing state influence on market forces—Fiscal policies should not be limited to only one type of technology or market sector. Wisconsin should let the market determine where growth will occur and be ready to support that growth in any sector.
- Encouraging new investments—Wisconsin must avoid creating incentives for R&D or investment that would be conducted even without a tax credit. Rewarding new investments will result in bigger growth than rewarding existing investments.
- Creating a culture of risk-taking—Financial risk is the basis for the New Economy and the state must take risks in order to encourage entrepreneurs and investors to do so as well. The state must be willing to think like a private investor when appropriate to its fiduciary duties.
- Seizing the opportunity to lead—Where Wisconsin has an advantage in creating new policies, we must take initiative and bring other states with us. Forward thinking is not enough, forward action is required.

While adopting certain specific fiscal and tax policies is not guaranteed to result in a booming New Economy, ignoring the potential of these policies could prohibit Wisconsin from participating in the next wave of economic growth and quality of life.

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