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Building a Strong Economy: *The evidence on combined reporting, public investments, and economic growth*

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Debates about public policy—particularly budget policy—are about choices: what is the best way to use limited resources to achieve important goals. Among the most important goals toward which all states strive is the building of a strong and prosperous economy that expands opportunity for everyone. With limited resources, state governments need to be thoughtful and efficient in identifying and pursuing the strategies that are most likely to be effective and not waste resources on less-effective strategies. Because state governments are required to balance their budgets, every proposed tax or budgetary expenditure for economic development needs to be examined in the context of whether it will be more effective than alternative uses of the same resources.

This paper examines the economic evidence on two related sets of policies:

- *Public investment and state economic development*, specifically in the areas of infrastructure, health care, and all levels of education;
- *State tax policy*, specifically in two areas: the effects of tax cuts and on state economic development, and a comparison of the performance of state economies that have a combined-reporting requirement for multi-state corporations to those states that have a separate-entity filing system (as Massachusetts currently does).

The Massachusetts governor has recently proposed a series of reforms to reduce tax avoidance. The debate over these proposals has, at times, focused on whether companies that are taking advantage of existing loopholes are behaving inappropriately. That debate, however, distracts from the more important issues at stake. As long as some tax avoidance strategies remain legal, most multi-state businesses with the accounting and legal capabilities necessary to take advantage of these loopholes will likely do so. *In the end, the more important policy question is whether it is good for a state's economy to maintain a tax system that allows tax avoidance, or whether the state revenue lost because of such a system could be used more effectively as part of a comprehensive economic development strategy.*

Both national studies and careful analyses of the Massachusetts economy suggest that investments in local services, education, infrastructure, and health care can contribute significantly to the long-term strength of the state economy. The data on tax policy is mixed. Some studies of specific tax cuts have found positive economic effects, but these studies have generally failed to control for the costs of these tax cuts. Because of the requirement to balance the budget, a state that cuts a tax must, ultimately, either raise another tax or cut spending. The same is true when a state increases spending for a particular program. Thus, studies that examine only the positive effects of specific tax or spending policies cannot provide a full picture of how those policies contribute to the strength of a state economy. Therefore, this paper also looks at those studies that have compared the effects of tax cuts and increases with corresponding spending cuts and increases. These studies have not generally found statistically significant positive effects for tax cuts. However, several studies have found that additional public investments, paid for by tax increases, can have positive net impacts on state economies.

This paper also will examine the economic performance of Massachusetts compared to those states that have adopted combined as opposed to separate-entity reporting. Finally, this paper will provide background on current and historic rates of business taxation in Massachusetts and examine how they compare to the rest of the nation.

While this paper focuses on the economic development effects of various policies, many of the investments examined also provide less quantifiable benefits to the people of a state. Education can improve the future lives of students in many ways that have little to do with their economic productivity. Likewise, given that education reduces crime, non-students also benefit from public investment in education. Similarly a state with high quality public infrastructure can be a more pleasant place to live for reasons that are not directly related to economic growth. Similarly, allowing tax avoidance by certain businesses may benefit those businesses in ways that don't relate to the overall strength of the state economy.

PUBLIC INVESTMENTS AND ECONOMIC DEVELOPMENT

A substantial body of economic research has examined the effects of public investments in infrastructure, education, and other economic development efforts. These studies provide evidence of the types of public investment that are likely to have the greatest positive impact on economic growth.

Infrastructure improvements and economic development

Research shows an emerging consensus that public investment in infrastructure either stimulates or supports economic growth and activity. In the leading reviews of this research, not every study on the issue has found such an effect in every case, but most have shown a positive relationship between investment in public infrastructure and positive economic outcomes.

An early literature review of the research on the role of public capital investments in economic activity by Randall Eberts concluded that, “The consensus among economists is that public infrastructure stimulates economic activity, either by augmenting the productivity of private inputs or through its direct contribution to output” (Eberts 1990). Eberts further found public and private capital to be complements rather than substitutes. He suggests that public capital may, in fact, be a “precondition for economic growth.” In that context, public investments in infrastructure are imperative for future private investment.

Econometric studies consistently find strong relationships between spending on infrastructure and economic growth. In a survey of 30 such studies, Bartik (1991) found that increases in spending on education and infrastructure are particularly strongly related to growth. Ronald Fisher (1997) found that in 27 of 43 studies, public spending had a positive impact on economic growth; transportation spending had the clearest impact, but spending on public safety and education were also related to growth. Some services, like transportation infrastructure affect the private sector in a direct way—better roads make it easier for firms to transport goods and people. Other services, such as education and health services, improve the productivity of employees.

A review of studies of transportation infrastructure programs by the Federal Highway Administration (2001) found that these programs had positive results for economic growth. The presence of transportation infrastructure was related to economic growth, being the most effective when found in conjunction with other factors, like proximity to large metropolitan areas, and the existence of other kinds of economic development programs.

The findings of recent research in Massachusetts have been consistent with the evidence that public investment is an important element in building strong local economies. The Center for Urban and Regional Policy (Bluestone, Clayton-Matthews, Soule 2006) found that among the factors that influenced the location decisions of businesses were “the availability of an appropriate labor pool in the *region*, the timeliness of approvals and appeals in the *local municipality*, the quality and capacity of the *local municipal* infrastructure, *local access* to roads and airports, minimal *local* traffic congestion, reasonable *local property taxes*, and a *low neighborhood crime rate*.” (Emphasis in the original).

In light of the evidence on the role that quality public infrastructure can play in economic development, the current situation in Massachusetts may be cause for concern. The recently released report of the Massachusetts Transportation Finance Commission concludes that, “over the next 20 years, the cost just to maintain our transportation system exceeds the anticipated resources available by \$15 billion to \$20 billion. This does nothing to address necessary expansions or enhancements” (p. 1). Furthermore, the Commission has said they deliberately made very conservative assumptions to avoid overstating the scale of the problem. Therefore, the Commission’s estimate of the gap between available and needed resources to maintain the state’s transportation

infrastructure, \$15.350 billion to \$19.577 billion, ought to be considered a conservative estimate (Massachusetts Transportation Finance Commission 2007).

Health care and economic growth

Health care spending is also associated with economic growth. On the most general level, the maintenance of basic health is necessary for labor productivity and investment. Developing nations struggle to create health care systems needed to allow and facilitate economic development (Bloom and Canning 2000).

At the state level, the Medicaid program accounts for most public health care spending. This program exists to provide essential health care for millions of Americans, being especially vital for low-income families and seniors. Medicaid also brings federal money into the state. Since the federal government pays for about 50 percent of Medicaid spending, every dollar of its own resources the state spends on Medicaid brings an additional dollar into the state economy. While states generally face a zero sum game when they seek to stimulate the economy by increasing economic activity through tax cuts or spending increases, Medicaid is an exception. In general, any new dollar added to the economy through tax cuts or spending increases is balanced by a dollar taken out of the economy by spending cuts or tax increases to keep the budget balanced. The federal role in the Medicaid program means that for every dollar spent on Medicaid only fifty cents has to come from state taxes. This federal money can stimulate the state's economy, and some estimates of an economic multiplier effect point to even more growth than would be suggested by the size of the federal reimbursement. In fiscal year 2005, Massachusetts spent \$4.65 billion in state funds on its Medicaid program (MassHealth). This money was matched by a similar amount of federal spending, and a study by Families USA estimates that this stimulated over \$10 billion in new business activity, including \$3.6 billion in wages from new job creation (Families USA 2004).

Education and economic growth

Having no other mines to work, Massachusetts has mined into the human intellect; and from its limitless resources, she has won more sustaining and enduring prosperity and happiness than if she had been founded on a stratification of silver and gold, reaching deeper down than geology has yet penetrated.

—Horace Mann, First Massachusetts Secretary of Education (1837-48), *Tenth Annual Report of the Secretary of the Massachusetts Board of Education* (1846).

Public leaders throughout the Commonwealth's history have expressed a conviction that for our Commonwealth to prosper economically, Massachusetts must make sure that our people are well educated. There is abundant economic evidence to support this conviction.

Over the past several decades, economists and business leaders alike have come to recognize the contribution of the skills and knowledge of the labor force to long-term

economic growth. Numerous studies have quantified the contribution of education to total economic growth. In reviewing these, Roland Sturm of the RAND Corporation concludes that “regardless of the particular calculation, education and its effect through labor quality are generally found to be among the most important contributors to economic growth” (Sturm 1993).

Moreover, education’s contribution to economic growth seems to be increasing over time. Due to rapid advances in technology, ideas are increasingly being substituted for physical matter in the creation of economic value (Greenspan 1994; Marshall & Tucker 1992).

Through appropriate public investments, state and local government can play a critical role in making sure a state has the human capital needed to build a strong and highly productive economy. By helping people to develop the skills that match the opportunities that will be available in the economy, a state government can expand economic opportunity and attract the high-wage businesses that need skilled and educated employees. When an educated workforce acts as a magnet to attract high-wage employers, the entire state economy benefits as the wages from those good jobs are spent in local communities, further stimulating economic activity.

There has been extensive research on how particular investments in education relate to improving the skills and earning power of the people of a state. These studies, reviewed below, look at policies that range from high quality pre-kindergarten programs to expanding access to public higher education.

Preschool investments as economic development

When children start out with high-quality health and educational resources, they are more likely to become productive individuals and to contribute positively to their communities. Longitudinal studies calculate a significant return on investment (ROI) for preschool education as well as a net public-dollar savings because of a decreased likelihood for preschool participants to repeat grades, require remedial education, be incarcerated for crimes, or become dependent on welfare (Barnett & Hustedt 2003). In addition, participating children are more likely to graduate from high school, attend college, and earn more as adults, thus they eventually pay back more to society in the form of taxes. Many states are moving toward offering subsidized preschool, particularly for at-risk children, but funding these programs remains a challenge.

Researchers at the Federal Reserve Bank of Minneapolis, in a widely publicized study, found that “investment in early childhood development programs brings a real (that is, inflation adjusted) public return of 12% and a real total return, public and private, of 16%” (Grunewald & Rolnick 2003). Grunewald and Rolnick note the absence of conventional economic development investments that generate such a substantial return. A recent study of preschool investments in Massachusetts found that every dollar spent on high-quality preschool education would yield \$1.18 in either savings or additional revenues (Belfield & McEwan 2004). Another recent study of public investment in high-quality prekindergarten in Massachusetts found that, on top of government budget

benefits, such an investment would eventually generate large increases in the earnings of the citizens of the Commonwealth and substantial savings to residents from less crime (Lynch 2007). For example, a prekindergarten program targeted at the poorest children in the state would generate annual budgetary, earnings, and crime benefits that would surpass the annual costs of the program within six years, and within 44 years the total annual benefits would exceed the annual program costs by a ratio of more than 13.5 to 1. Likewise, a universal pre-K program for all 3- and 4-year-old children would create annual budgetary, earnings, and crime benefits that would surpass the annual costs of the program within nine years, and within 44 years the total annual benefits would exceed the annual program costs by a ratio of more than 7.5 to 1.

At least as important as the fact that this type of investment appears to pay for itself from a state budget perspective is why it does so: it pushes young people along a path toward acquiring the skills and education that employers look for and will reward with higher wage jobs. As such, it is an effective investment in the long-term strength of a state economy.

Primary and secondary investments as economic development

Research shows that a high-quality education increases the earnings of individuals and the economic health of their communities. Recent studies show that education spending can have a direct, positive impact on the business climate and can improve the success of at-risk students, whose contributions to the economy are critical if we are to achieve a high-value/high-wage economy in the 21st century.

For example, a meta-analysis of research studies examining the relationship between spending and student outcomes found that the level of per pupil spending and teacher experience had the most substantial impact on outcomes (Hedges, Laine, & Greenwald 1994). These researchers also concluded that the necessary distribution of additional resources to achieve optimal outcomes might vary based on local conditions.

Spending on education will have a greater chance of success if coupled with specific reforms, such as smaller class sizes, greater access to technology for at-risk students, support for teacher training and innovation, and improved accountability structures (Murnane & Levy 1996).

There is particularly strong evidence on the positive effects of smaller class sizes in the lower grades. The large-scale Project STAR study, based in Tennessee, found that smaller class sizes have a significant impact on reading and math scores (Folger 1989). This study randomly assigned about 7,000 students in kindergarten through 3rd grade to one of three possible settings: 1) small class size (13-17 students); 2) regular class size (22-25 students); and, 3) regular class size with a teacher's aide. The use of random-assignment makes this a particularly robust study of the impact of smaller class size on achievement.

In an analysis of the Project STAR data, economist Alan Krueger found an average four percentile-point increase in performance on standardized tests in the first year students

are placed in small class size classrooms; ongoing increases of one percentile point in performance for subsequent years in small class size settings (relative to those in regular size classrooms); and, a larger effect of class size on minority and low-income children than on other children (Krueger 1999). Not only were the achievement gains evident in the years that children were assigned to classrooms with small class sizes, but achievement differences between students in small versus regular class size settings persisted through junior high school after all students had returned to larger classes (Mosteller 1995). To achieve smaller class sizes and the attendant achievement gains, more teachers would be required in each school, necessitating a greater investment of resources.

In Massachusetts, between 2002 and 2007, the amount of “Chapter 70” state aid provided to cities and towns for primary and secondary education has declined by \$175 million or 4.8 percent after adjusting for inflation using the consumer price index. Massachusetts’ education funding law, however, identifies a particular measure of inflation for estimating education costs (M.G.L.c. 70, § 2). Using that measure, the implicit price deflator for state and local governments, to adjust for inflation, Massachusetts’ support for primary and secondary education declined by \$502 million or 12.5 percent between 2002 and 2007.

Community college investments as economic development

Community colleges play a vital role in U.S. higher education. Viewed over a full-year, more for-credit undergraduates attend community colleges than attend baccalaureate-granting institutions. The rate of return on community college education is positive: those who attend community college earn significantly higher wages than those who stop at a high-school diploma. The average community college entrant, who never attended a four-year college and enrolls but does not complete a degree, earns 9 to 13 percent more than the average high school graduate, age 19-38, with similar high school grades and test scores. The average earnings of those who complete associate’s degrees are 29 percent higher than average earnings for those with just a high school diploma (Census 2006).

Community colleges also convey substantial benefits to the community as a whole. Because community colleges offer a highly cost-effective way to obtain the first two years of a bachelor’s degree, college is accessible to many low-income, minority, and adult students who would not or could not attend a four-year school. Community colleges are also an essential element of states’ toolbox for preparing adults for the workforce through certificates, degrees, and customized training and workplace literacy. Entire sectors of the economy depend on the technical workers that community colleges produce (Katsinaa, Alexander, & Opp 2003).

The importance of community colleges to the state’s economy is widely recognized. According to a 2005 Massachusetts State Senate Commission on higher education, “Community colleges work with businesses in their regions to develop programs that [meet] local workforce needs. In 2003 alone, there were over 7,000 business and industry courses serving over 65,000 participants” (Senate Task Force on Public Higher Education 2005).

Massachusetts' funding for public higher education has declined precipitously since 2001. The state's funding for public higher education, adjusted for inflation, declined by \$241 million or 18.9 percent between 2001 and 2007.

Education and earnings

One basic measure of the economic success of a state is whether the people of that state are able to find good-paying jobs. Ultimately a strong state economy depends, in large part, on having individuals with the education and skills that will allow them to be highly productive. But raising the education and skills level of a state workforce requires not just individual effort, but also public investment and a common commitment to build for the future. It involves a choice to strengthen the skills and earning capacity of individuals and thus the strength and productivity of the state economy, rather than to accept a lower level of investment in human capital and use state resources to try to attract employers willing to hire employees with weaker skills. In making that choice, it is important to examine whether education is indeed increasing the productivity and value of workers to the economy and improving their opportunities. A good measure of this is the relationship of education to earnings.

There is ample evidence that the employment opportunities for individuals improve dramatically with education. In 2005, the average annual earnings of individuals with a bachelor's degree were 86 percent higher than the average annual earnings of individuals with just a high school degree. A bachelor's degree is also a gateway to further education and higher earnings. Average earnings for a worker with a master's degree in 2005 were 24 percent more than the average earnings of those with only a bachelor's degree (Census 2006). A state that provides the quality primary and secondary education that prepares young people for college and that provides affordable higher education will create a workforce that has the skills and education that employers seek.

Research has clearly identified such a link between investments in education and workers' future earnings. A review of the literature on school quality and earnings found, "a high degree of consistency across studies regarding the effect of school quality on students' subsequent earnings. The studies typically find that a 10 percent increase in school expenditures is associated with a 1 to 2 percent increase in annual earnings for the students later in life" (Card & Krueger 1996). In the case of this research, school quality is measured by the financial resources spent, therefore directly relating investment in school to students' future earnings.

STATE TAX POLICY

Governor Patrick has proposed a series of reforms to the state tax code aimed at reducing corporate tax avoidance. The most significant reform would be to shift from the state's current practice of allowing separate entity reporting, in which each subsidiary of a corporation is taxed separately, to the practice of requiring combined reporting, in which

a company with numerous subsidiaries that together constitute a unified business would file one combined report and would be taxed as one company.

The primary shortcoming with the separate entity reporting system that Massachusetts currently uses is that it allows multi-state companies to shift income between subsidiaries to hide much of their income in tax shelters that go beyond anything envisioned by policymakers (see Appendix A for the Massachusetts Department of Revenue’s description of a series of such strategies.). It has famously been described as “an open invitation to tax avoidance” by Charles McLure, a Senior Fellow at the Hoover Institution and former Reagan Administration Treasury Department official. Sixteen states, including large states like California and Illinois, have long used combined reporting to level the playing field and reduce corporate tax avoidance. As there has been increased attention focused on the costs of tax avoidance in recent years, several additional states have begun to require combined reporting: Vermont, West Virginia, New York, and Texas. In addition, such a reform has been proposed this year by the governors of Iowa, Michigan, Pennsylvania, and North Carolina (as well as Massachusetts).

The other major reform proposed in Massachusetts is to conform to the federal rules about when a company is classified as a corporation. Virtually all other states conform to the federal rules. By not conforming, Massachusetts allows multi-state companies an additional set of tax avoidance strategies.

It is important to note that the issue in Massachusetts is not whether to adopt or repeal targeted tax breaks supported on the basis of creating jobs or other economic benefits. Rather the question is whether to continue to let multi-state companies use certain accounting techniques that allow them to reduce their tax liabilities in the state. To the extent that there is an economic argument against combined reporting, it is not that allowing tax avoidance is the most efficient tax policy to encourage economic growth, but rather it appears to be the idea that any state policy that increases the amount of taxes paid by companies could have a negative effect on the overall economy. This paper will review the evidence on that topic by examining both studies dealing with the effects of targeted tax incentives as well as studies that only look at overall levels of taxation.

Tax Cuts and Economic Development

When a state government injects money into the economy through tax cuts or increased spending, it stimulates economic activity. Because states are required to balance their budgets, however, any reduction in one tax generally has to be paid for by an equal-sized increase in a different tax or by cuts in spending. Likewise, an increase in spending has to be paid for by an equal-sized cut in other spending or by tax increases.¹ Therefore, when analyzing any tax or spending policy, it is essential to ask what the costs and benefits will be in the real world.

The evidence from the hundreds of survey, econometric, and representative firm studies that have evaluated the effects of state and local tax cuts and incentives makes clear that

¹ One major exception to this rule is state Medicaid spending, as discussed above.

these strategies are unlikely to substantially stimulate economic activity. Most of the studies that suggest that tax cuts have a positive effect on economic activity find the impact of tax cuts to be very small and to exist only when public spending is held constant as taxes decrease—a circumstance that is highly uncommon in the real world. In addition, a growing body of research suggests that state and local tax cuts and incentives cannot create jobs in a *cost-effective* manner. The costs per job created by tax cuts are high, ranging from \$40,000 to over \$100,000 in lost tax revenue per job, and outstrip the costs of creating most public-sector jobs (see Fisher and Peters 2000, Peters and Fisher 2002, and Lynch 2004).

A misperception about the relationship between tax policy and economic development is often caused by misunderstandings about what is being tested by various econometric studies. Several studies have found that, if a state increases taxes and does not then spend the new revenue, that this removal of money from the economy would have a negative effect. A major review by Timothy Bartik of econometric studies examining the economic effects of tax increases (1994a) reported that 53 of 75 studies found at least one statistically significant negative tax effect: under special circumstances, such as when government spending is held constant as taxes increase, an increase in taxes has a high probability of causing some decrease in economic activity.

Since it is clear that taxes and public spending are linked, why would econometricians measure the effects of tax changes while artificially holding public spending constant? Holding public spending constant is an attempt to isolate the “pure” tax effect. In other words, if taxes and spending are allowed to change simultaneously, econometric studies would measure the effects of tax *and* spending changes rather than just the effects of tax changes. If public services are not held constant, then the estimate of the negative effect of a tax increase will also be influenced by the positive “effects of public services on growth to the degree that public-service levels and taxes are positively correlated (as they typically are since higher taxes finance more services)” (Wasylenko 1997, p.46). While there is value to examining particular tax policies in isolation, ultimately policy makers need to examine studies that model the real world in which tax cuts have to be paid for with spending cuts or tax increases.

In addition to the studies described above that examined the economic impacts of tax policies when public spending is artificially held constant, an additional series of studies have examined the economic effects of tax policies more realistically by taking into account the interaction of tax and spending policies.

Net Effect of Tax and Spending Changes

Several significant studies have examined what would happen if taxes were increased to pay for expanded public services. These studies suggest that state and local tax increases used to finance public services may accelerate state and local growth.

Helms (1985) found that increases in state and local taxes used to augment public spending on health, highways, schools, or higher education caused growth in state personal income. Bartik (1989) found that increases in state and local taxes increased the

rate of small-business creation if the additional tax revenues were spent on local schools and fire protection. Munnell (1990) found that state and local tax increases used to finance improvements in highways, sewerage, and other infrastructure increased the growth rate of private employment.

Goss and Phillips (1994) found a negative and statistically significant effect of state and local personal taxes on state employment growth rates. However, they also found a positive and statistically significant effect of total state economic development agency spending on employment. They concluded that a doubling of state “economic development spending, financed by personal taxes, would increase the employment growth rate by an estimated one percent” (1994, p. 297).

In a later study Bartik (1996) found that increases in higher education and health spending, financed by property tax increases, would increase state manufacturing output in the long run (11 years). On the other hand, increases in spending on roads, financed by non-property tax increases, would reduce manufacturing output in the long run. All other increases in state public services financed by tax increases had little net effect on a state’s economic performance.

More importantly, Bartik’s 1996 study—the only one to consider the effects of a change in one state’s tax and spending policy on its neighboring states—found that increases in most public services, paid for by tax increases, had significant positive effects on regional or multi-state economic development. This suggests that, if a state were to cut taxes and pay for the tax cut by reducing public services, then its neighboring states would suffer a decline in output and employment. If all states cut taxes and reduced public services, one could expect a national decline in output and employment.

Bartik and Erickcek (2003), using a regional econometric model, analyzed the economic impacts of eliminating Michigan’s fiscal year 2004 budget deficit by raising taxes or cutting spending. They concluded that raising taxes by \$925 million would be better for jobs and the economy than cutting spending by the same amount. They estimated that “if the state decided to balance its fiscal year 2004 budget by increasing taxes, instead of cutting state spending, the net impact on state employment would be an increase of 7,610 jobs and an increase in state personal income of \$309 million.”

In response to a fiscal crisis, New York Governor Pataki proposed cutting state spending on public education by \$1.8 billion in 2003. This was proposed as the only acceptable option because of the negative economic consequences that would ensue from a tax increase. An analysis by the Fiscal Policy Institute compared this proposal with the possibility of not cutting education spending but instead increasing individual income taxes to make up the \$1.8 shortfall. Their analysis, relying on an input-output model often used for analysis of economic development initiatives, found that maintaining education spending through a tax increase would result in 58,000 more jobs and \$160 million more in disposable personal income when compared to cutting education spending and holding taxes constant (Fiscal Policy Institute 2003).

The fact that public spending on education, health care, and infrastructure can stimulate the economy more than tax cuts should come as no surprise. After all, when taxes are cut, part of the forgone tax revenue will not be spent locally—some of it will be saved, some will be spent out of state, and some will be taxed by other jurisdictions.² But when taxes are raised in order to increase public services, the additional spending is typically done locally.

Economic Growth in States With Combined Reporting

While most academic research suggests that closing tax loopholes and then putting the extra revenue toward effective public investments will not negatively affect a state's economy, it may still be instructive to see what has happened when states have taken steps to reduce tax avoidance. For several decades now there have been 16 states that require combined reporting in order to reduce tax avoidance by multi-state companies. Have these state's shown weaker economic growth than those that use separate-entity reporting and therefore tolerate greater levels of tax avoidance? As the data below shows, the economies of the states that have required combined reporting have performed at least as well as those that allow separate-entity reporting.

While some of this data suggests that states with combined reporting have experienced greater economic growth than those with separate-entity reporting, we do not intend to suggest that this shows that reducing tax avoidance (by requiring combined reporting) causes greater economic growth; correlation does not prove causation. But since some argue that combined reporting could be an impediment to growth, it is important to recognize that most of the states whose economies have shown the strongest economic growth since 1990 use combined reporting.³ Other factors, such as the regions of the country in which growth is occurring, may explain much of the variation seen in the state comparisons.

An examination of growth in gross domestic product by state (formerly known as gross state product) shows that states with combined reporting do not seem to be at a disadvantage. (See Table 1.) Five of the seven fastest growing states use combined reporting. The average growth in the 16 combined reporting states (3.3%) was somewhat faster than in the other 34 states (3.1%).

²Given the deductibility of state taxes on federal tax returns, cuts in state taxes in part simply shift revenue from the states to the federal government. For example, for every hundred dollars in state tax cuts that a corporation in Massachusetts receives, the corporation will have to pay 35% or \$35 to the federal government in increased federal corporate income taxes.

³We have used this starting date for this comparison because some of the data we use, for instance the Bureau of Labor Statistics' current definition of manufacturing, only exists from then on. The picture does not significantly change for overall growth if the analysis is extended back to the early 1980s.

Table 1. Comparison of Real Gross Domestic Product by State in Combined Reporting and Separate Entity Reporting States

State	Total Change 1990-2005	Average Annual Change	Rank
US	59.1%	3.1%	
Average Growth in Combined Reporting States	62.3%	3.3%	
Average Growth in Separate Entity Reporting States	57.9%	3.1%	
Arizona	144.6%	6.1%	1
<i>Nevada</i>	140.2%	6.0%	2
Idaho	122.4%	5.5%	3
Oregon	114.6%	5.2%	4
Colorado	111.3%	5.1%	5
New Mexico	106.5%	5.0%	6
Utah	105.9%	4.9%	7
Georgia	90.2%	4.4%	8
Florida	85.8%	4.2%	9
<i>South Dakota</i>	84.6%	4.2%	10
Texas	83.7%	4.1%	11
New Hampshire	80.7%	4.0%	12
North Carolina	78.9%	4.0%	13
Tennessee	78.4%	3.9%	14
Delaware	76.4%	3.9%	15
Minnesota	73.8%	3.8%	16
Arkansas	70.4%	3.6%	17
Virginia	66.8%	3.5%	18
Indiana	63.7%	3.3%	19
<i>Washington</i>	63.5%	3.3%	20
Wisconsin	62.5%	3.3%	21
South Carolina	58.0%	3.1%	22
Montana	57.5%	3.1%	23
Iowa	56.2%	3.0%	24
North Dakota	55.3%	3.0%	25
Alabama	54.7%	3.0%	26
Kentucky	54.2%	2.9%	27
California	53.7%	2.9%	28
Nebraska	53.7%	2.9%	29
Vermont	52.9%	2.9%	30
Massachusetts	52.0%	2.8%	31
Mississippi	51.2%	2.8%	32
Missouri	50.4%	2.8%	33
Maryland	49.7%	2.7%	34
Illinois	48.5%	2.7%	35
Kansas	48.4%	2.7%	36
Michigan	46.6%	2.6%	37
New Jersey	44.7%	2.5%	38
Oklahoma	44.6%	2.5%	39
Ohio	43.5%	2.4%	40
Rhode Island	41.5%	2.3%	41
Pennsylvania	41.4%	2.3%	42
New York	38.4%	2.2%	43
Connecticut	38.3%	2.2%	44
West Virginia	36.1%	2.1%	45
Maine	35.7%	2.1%	46
Wyoming	34.7%	2.0%	47
Hawaii	14.7%	0.9%	48
Louisiana	11.3%	0.7%	49
Alaska	-7.3%	-0.5%	50

Source: Bureau of Economic Analysis, U.S. Department of Commerce, Gross Domestic Product by State used to be referred to as Gross State Product (GSP)

Combined Reporting States are highlighted.

State without Corporate Income Tax are italicized

Turning to employment growth, we see similar results. (See Table 2.) Four of the five states with the greatest employment growth since 1992 have required combined reporting. Employment growth was again somewhat faster in the combined reporting states than in the states without combined reporting.

Table 2. Annual State Total Non-Farm Employment Change in Combined Reporting and Separate Entity Reporting States			
State	Total Change 1990-2006	Average Annual Change	Rank
Total 50 States	24.0%	1.4%	
Average Growth Combined Reporting States	27.2%	1.5%	
Average Growth Separate Entity Reporting States	22.8%	1.3%	
<i>Nevada</i>	<i>106.4%</i>	<i>4.6%</i>	<i>1</i>
Arizona	78.2%	3.7%	2
Utah	66.3%	3.2%	3
Idaho	66.0%	3.2%	4
Colorado	49.8%	2.6%	5
Florida	48.9%	2.5%	6
Montana	45.9%	2.4%	7
New Mexico	43.6%	2.3%	8
<i>Texas</i>	<i>41.6%</i>	<i>2.2%</i>	<i>9</i>
<i>Wyoming</i>	<i>39.4%</i>	<i>2.1%</i>	<i>10</i>
<i>South Dakota</i>	<i>38.2%</i>	<i>2.0%</i>	<i>11</i>
Georgia	36.6%	2.0%	12
Oregon	35.6%	1.9%	13
<i>Washington</i>	<i>33.4%</i>	<i>1.8%</i>	<i>14</i>
North Dakota	32.8%	1.8%	15
Alaska	32.4%	1.8%	16
Arkansas	29.8%	1.6%	17
Nebraska	29.7%	1.6%	18
Minnesota	29.2%	1.6%	19
Oklahoma	29.2%	1.6%	20
North Carolina	28.8%	1.6%	21
Virginia	28.7%	1.6%	22
Tennessee	26.9%	1.5%	23
New Hampshire	25.9%	1.4%	24
Delaware	25.6%	1.4%	25
Kentucky	25.5%	1.4%	26
Wisconsin	24.8%	1.4%	27
Kansas	24.0%	1.4%	28
South Carolina	23.5%	1.3%	29
Iowa	22.6%	1.3%	30
Mississippi	22.0%	1.2%	31
Alabama	21.2%	1.2%	32
California	20.6%	1.2%	33
West Virginia	20.0%	1.1%	34
Vermont	19.3%	1.1%	35
Maryland	19.1%	1.1%	36
Missouri	18.3%	1.1%	37
Indiana	17.9%	1.0%	38
Louisiana	16.9%	1.0%	39
Hawaii	16.7%	1.0%	40
Maine	14.9%	0.9%	41
Illinois	12.2%	0.7%	42
New Jersey	12.1%	0.7%	43
Ohio	11.4%	0.7%	44
Pennsylvania	11.3%	0.7%	45
Michigan	10.0%	0.6%	46
Rhode Island	8.7%	0.5%	47
Massachusetts	8.6%	0.5%	48
New York	4.9%	0.3%	49
Connecticut	3.7%	0.2%	50
Combined Reporting States are highlighted.			
<i>States without Corporate Income Tax are italicized</i>			
Source: Bureau of Labor Statistics, US Department of Labor			

Because manufacturing jobs are often more mobile than retail, government, and service sector jobs, it could be that a focus on that sector would highlight any existing negative effect of combined reporting. The data on manufacturing appears to provide no support for the notion that combined reporting hinders job growth. (See Table 3.) In fact, nine of the ten states with manufacturing job growth from 1990 to 2006 used combined reporting. Only one of the ten states with the most rapid manufacturing job decline used combined reporting. Overall, states with combined reporting saw modest manufacturing job growth (1.5%) while those without combined reporting, on average, lost 21.8% of their jobs. While many factors could explain this difference, the evidence does not appear to support claims that implementing combined reporting would make it harder for a state to add jobs.

States mandating combined reporting throughout this period shown highlighted.			
	Median Change in Combined Reporting States	1.5%	
	Median Change in separate Entity Reporting States	-21.8%	
1	North Dakota	67.3%	
2	Idaho	25.7%	
3	Utah	18.6%	
4	Arizona	6.1%	
5	Iowa	5.6%	
6	Nebraska	4.4%	
7	Montana	3.6%	
8	Kansas	3.0%	
9	Minnesota	1.7%	
10	Oregon	1.3%	
11	New Mexico	-0.8%	
12	Texas	-2.3%	
13	Wisconsin	-3.4%	
14	Kentucky	-4.1%	
15	Oklahoma	-4.2%	
16	Indiana	-6.6%	
17	Alaska	-7.1%	
18	Arkansas	-9.3%	
19	Colorado	-12.3%	
20	Louisiana	-13.7%	
21	Georgia	-14.2%	
22	Vermont	-15.5%	
23	Alabama	-16.7%	median state
24	Florida	-18.5%	
25	Tennessee	-19.6%	
26	New Hampshire	-21.7%	
27	Missouri	-21.8%	
28	Mississippi	-23.5%	
29	California	-23.6%	
30	Ohio	-24.8%	
31	Illinois	-25.3%	
32	Virginia	-25.4%	
33	West Virginia	-25.6%	
34	Hawaii	-26.2%	
35	Delaware	-26.9%	
36	South Carolina	-27.7%	
37	Pennsylvania	-29.3%	
38	Maryland	-31.8%	
39	North Carolina	-32.8%	
40	Maine	-35.3%	
41	Connecticut	-35.6%	
42	Massachusetts	-37.8%	
43	New Jersey	-38.6%	
44	New York	-42.2%	
45	Rhode Island	-44.6%	

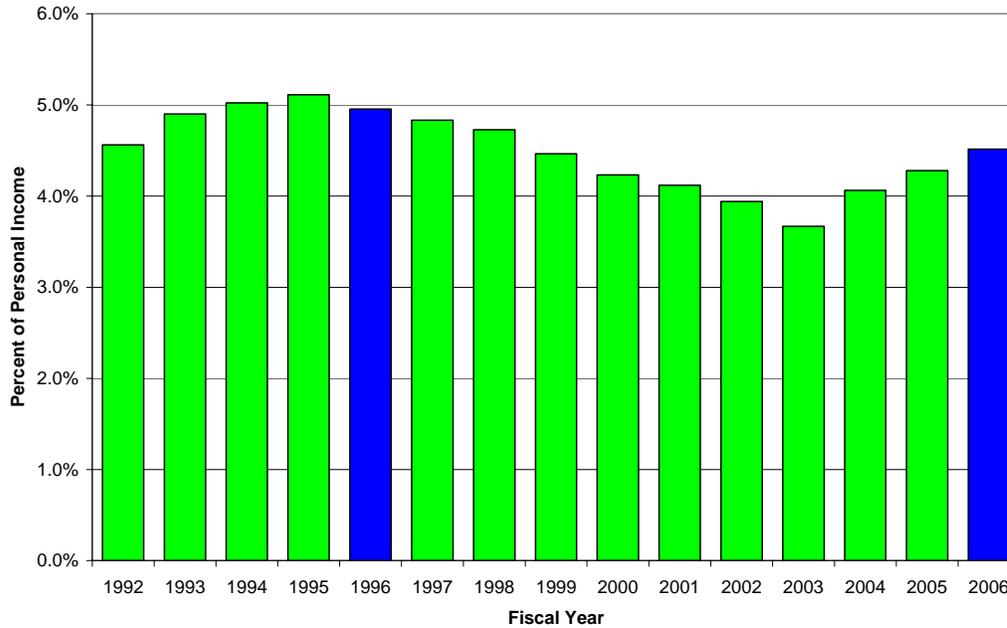
Source: Michael Mazerov, Center for Budget and Policy Priorities

Overall Business Taxation Trends in Massachusetts and Across the Nation

Businesses in Massachusetts pay property taxes, corporate income taxes (called excise taxes), sales taxes, personal income taxes from partnerships, and other smaller taxes and fees. Not all of the taxes that businesses pay, of course, have the same impact. Different taxes have different effects on business profits, product prices, and wages paid to workers. Perhaps more important is that businesses (and industries) vary substantially in how a state's tax system affects them. Thus, a "high tax state" for one business is often a "low tax state" for many others. So no single measure of the relative level of business taxation in a state will tell us much about the tax levels faced by particular firms in the state or sectors of the economy. Nevertheless, the concern over the ability to attract business to a state creates a demand for such a measure. In studies done for the Associated Industries of Massachusetts Foundation and the Committee on State Taxation, Ernst and Young has developed one such measure that seeks to evaluate all taxes paid by businesses. If we look at this broad measure of business taxation as it relates personal income for Massachusetts, then we see that there has been a general decline. There is also a cyclical pattern, since business income, upon which many business taxes are based, tends to decline sharply in recessions. The bars for 1996 and 2006 in Figure 1 below represent about the same point in the recoveries from the 1990/1991 and 2001 recessions respectively. So with the cyclical effects taken into account, business tax collections in Massachusetts are down by about 0.5% of personal income, or over \$1.5 billion.

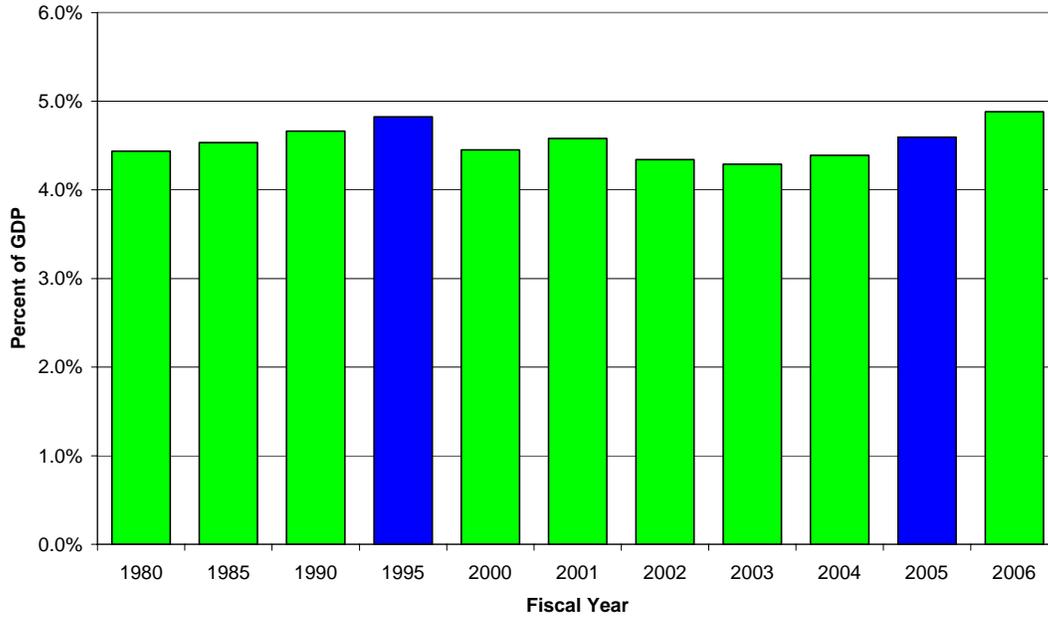
If we look at the Ernst and Young estimates for the Committee on State Taxation (COST) for 50-state taxes as a percentage of GDP, we see a similar cyclical pattern for the 2000-05 period. The overall decline from 1995 to 2005 was only 0.1 percent. (See Figure 2.) Also, in fiscal year 2005, business taxes as a percent of private-sector state GDP were 4.6 percent as a national average, but in Massachusetts they were only 3.9 percent. In fact, business taxes have taken a smaller percentage of GDP in Massachusetts than the national average in every year for which Ernst and Young has made estimates.

Figure 1.
Massachusetts Business Taxes as Percentage of Personal Income, 1992-2006



Source: Associated Industries of Massachusetts Foundation, *A Comprehensive Evaluation of Massachusetts Business Taxation*, June 20, 2003; Council on State Taxation, *Total State and Local Business Taxes, FY 2004* and subsequent updates of this through FY 2007. The only major difference in methodology between these studies was that the AIM Foundation study used a measure of Workers Compensation and Unemployment Insurance, while the COST surveys used only Unemployment Insurance. We have made the studies compatible by subtracting out Ernst and Young's estimates for Workers Compensation and Unemployment Insurance taxes for all years and adding data from the Massachusetts Division of Unemployment Assistance for Unemployment Insurance taxes.

Figure 2.
State and Local Business Taxes for the United States as a Percentage of Private Sector Gross Domestic Product, 1980-2005



CONCLUSION

When examining alternative economic development strategies, it is important to weigh the costs and benefits of each option. Reducing tax avoidance does increase the overall taxes of those companies that have been able to avoid taxes because of the existing Massachusetts tax laws. In a vacuum, this could have a negative effect. In reality, however, that effect must be weighed against the alternative uses of the \$500 million a year currently being lost because of tax avoidance. There is extensive evidence that, if these resources are invested in education, infrastructure, and other services on which a state economy depends, the net effect can be a stronger state economy. In addition to the econometric studies reviewed in this paper, the comparison of the recent economic performance of states that use combined reporting to those that do not shows no support for the contention that allowing extensive tax avoidance by multi-state companies is a particularly effective economic development strategy.

Massachusetts faces difficult challenges in building a state economy that will create growing prosperity through the 21st century. Meeting those challenges will require a common effort by businesses large and small, government, educational institutions, and people across the state. It will not be an easy task to find the right balance between investments in education and training to strengthen the skills of the state workforce, maintenance of the transportation and related infrastructure on which businesses depend, and the establishment of individual and corporate tax policies that raise needed revenue in a fair and efficient manner. As serious as the challenges are, Massachusetts already has great strengths: a larger share of college graduates than any state in the nation (Census 2005); public schools whose students consistently outperform the rest of the nation; among the world's leading universities and academic medical centers; and vibrant local communities. This is a foundation on which the people and the businesses that call Massachusetts home can build a future of expanding economic opportunity.

APPENDIX A EXAMPLES OF TAX PLANNING STRATEGIES ADDRESSED BY COMBINED REPORTING

Summary.

This memo attempts to give succinct descriptions of various separate company tax planning structures whose tax effect would be eliminated by combined filing. The Massachusetts Department of Revenue (DOR) encounters these fact patterns on a recurring basis. Taxpayer names are given only where particular cases have been reported in Court or Appellate Tax Board decisions, but the structures are not limited to the named taxpayers.

Captive REITs (Real Estate Investment Trusts).

Background. A **Real Estate Investment Trust (REIT)** is a pooled investment vehicle recognized under the Internal Revenue Code, similar to a mutual fund, which generally may invest in real estate and mortgages. It is required by federal law to have at least 100 shareholders. The REIT is eligible for a deduction from income for dividends that it pays to its shareholders. REITs generally pay out current earnings to shareholders as dividends and so have no taxable income; instead, shareholders pay tax on their dividend income. Although corporations are generally allowed a dividends-received deduction on dividends paid by their subsidiaries, under federal law the dividends-received deduction is not available for dividends received from REITs.

Planning Structures. REITs have been widely used for state tax planning. Many states, including Massachusetts, have their own dividends received deductions under state law, which have no special REIT rules. In these states, the REIT claims a dividends paid deduction and the shareholder corporation claims a dividends received deduction. The result is no state tax on the income. Massachusetts settled cases with 69 banks using this structure. It litigated the matter with BankBoston, and DOR recently prevailed in an Appeals Court decision. This one case alone was worth \$25 million. Although Massachusetts law has been amended to specifically disallow the dividends received deduction, later generation captive REIT structures have been developed where REIT dividends are paid to out-of-state holding companies, avoiding Massachusetts tax. Combined reporting would eliminate the benefit from such structures.

Example. BankBoston forms a captive REIT in which it holds a 99.9% interest. Remaining shares are held by corporate officers and employees. The bank contributes its portfolio of Massachusetts mortgages to the REIT. The REIT receives the mortgage payments and, in turn, pays this income to the shareholders. The REIT claims a dividends paid deduction and therefore has no taxable income. BankBoston claims a 95% dividends received deduction with regard to its REIT dividend. (The dividend-received deduction in Massachusetts is limited by statute to 95% of the dividend amount.) Result: no Massachusetts tax on 95% of BankBoston's mortgage income. Although DOR recently prevailed in an Appeals Court decision regarding this structure, DOR's

ability to challenge later generation structures involving BankBoston successor entities (Fleet Funding) are less certain. In the subsequent cases, which have been argued before the Appellate Tax Board and are awaiting decision, the REIT dividends were paid to out-of-state holding companies affiliates instead of directly to a Massachusetts bank. The tax and interest at issue in the later years is approximately \$46 million.

Income Shifting; Assignment of Income

Under separate company reporting, each company reports only its own income. By shifting income out of a company taxable in Massachusetts to an affiliate or subsidiary in a tax haven state, state tax can be avoided. One method is to contribute income-producing intangible assets to subsidiaries located in tax haven jurisdictions.

Example 1. In a recent case, a Massachusetts company had royalty income from third parties. The company simply contributed the intangible asset (a trademark) to a Delaware subsidiary. The subsidiary receives the income and pays no state tax. It then pays dividends to the Massachusetts parent, which qualifies for the 95% dividends received deduction. The result is that 95% of the income is sheltered from Massachusetts tax. In the case used in this example, the value of this issue was approximately \$18 million over three tax years.

Example 2. In several current cases, a large software company develops its software in a corporation that files returns in Massachusetts (and many other states). As new software is updated or developed, it contributes the right to license the software to a Nevada subsidiary. (Nevada has no corporate tax.) The subsidiary has bona fide operations – sales staff and bona fide third party licenses. Through this structure, the parent reduces its income and state tax (in Massachusetts and elsewhere) by claiming development expenses, even though the corresponding income from software licensing is split off from the parent and isolated in the subsidiary. The subsidiary asserts that is not separately taxable in Massachusetts and that its sales should not be apportioned to Massachusetts. The tax and interest at issue in the combined cases is over \$40 million.

Income Shifting; Transfer of Assets Before Sale

A similar shifting of income can involve transfer of appreciated assets to an out-of-state or other non-taxable affiliate before their sale.

Example 1. In the *General Mills* case decided by the Supreme Judicial Court (SJC), the taxpayer transferred intangible assets of a Massachusetts subsidiary that it was selling to a newly-formed Delaware subsidiary, a few days before the transaction. It treated the capital gain from the sale as belonging to the Delaware subsidiary and paid no Massachusetts tax on this gain. The SJC disallowed the transfer and upheld DOR's tax assessment. The case was worth approximately \$45 million (including interest). Although tax was ultimately paid, DOR had to uncover the matter in an audit and contest the case up to the SJC in order to prevail. Combined reported would have prevented the shifting of income.

Example 2. Transferring assets prior to sale is a common practice with large dollar effects. DOR currently has a case worth, in total, over \$200 million that is being contested. The major issue in the case is a transfer of appreciated stock before sale. In this fact pattern, in order to obtain federal antitrust clearance for a proposed merger, a major company was ordered to sell stock of a subsidiary. After being ordered to sell the stock, it transferred the stock to a business trust, which the company contends was (under the law then in effect) an exempt entity, and paid no tax on the gain. The DOR is arguing that the transfer was purely tax motivated and should be disregarded (in a manner similar to *General Mills*).

Income Shifting; Intercompany Interest & Royalties.

Background. Perhaps the most widespread technique used to shift income from separate return jurisdictions is payment of interest or royalties to affiliates in tax haven states. These structures have been partially addressed by previous loophole-closing legislation, the so-called “addback rules,” which generally disallow intercompany interest and royalty expense unless the disallowance would be “unreasonable.” The DOR currently has a substantial inventory of cases where, despite the new addback statute, the taxpayers nevertheless assert that expenses should be allowed under the reasonableness exception. None of these cases have yet been decided by the Appellate Tax Board or courts.

Example 1; Trademarks. *Syms* and *Sherwin-Williams* were both cases considered by the SJC. In each case, a Massachusetts company contributed intellectual property – trademarks and tradenames – to a Delaware subsidiary and thereafter licensed the use of the intellectual property back from the subsidiary. As a result of the restructuring, the parent company would make payments for use of property that it previously owned outright. In the *Syms* case, the Delaware subsidiary immediately returned the licensing payments to the parent in the form of dividends. In *Sherwin-Williams*, the Delaware subsidiary retained and invested the licensing payments. The SJC upheld the *Sherwin-Williams* structure, finding that it had economic substance even if there was tax motivation. By contrast, the SJC disallowed the expenses claimed in *Syms*, finding that that transaction was a sham. The addback statutes were adopted in 2003 in response to these two decisions, but litigation continues as to the scope of the reasonableness exception.

Example 2; Dividend Notes. DOR has had several cases where one affiliated corporation purports to borrow money from an affiliate and then deducts interest expense. This structure has been used whether or not money changes hands. In particular, a subsidiary paying tax in Massachusetts declares a dividend to its non-Massachusetts parent in the form of a note payable to the parent. No cash changes hands, but the parent then holds a note payable from the subsidiary. The subsidiary then makes payments to the parent, treating them as deductible interest expense, rather than non-deductible dividends. There have been many of instances of this income-shifting. The dividend notes have, in several cases, had a face amount of debt in the billions of dollars, resulting in tens of millions of dollars of deductions for the subsidiary.

Income Shifting; Factoring of Receivables.

Retail companies often sell their accounts receivable to a third party at some discount to face value in order to improve their cash flow. This can be done with unrelated parties in bona fide transactions. However, a number of major retailers sell the receivables first to out-of-state affiliates at a steep discount and claim losses on the transactions. The affiliates then resell the receivables to third party investors at a profit, claiming that such profit is not taxable in Massachusetts or other states where the retailers do business. In several cases, the affiliate has been capitalized by loans from the retailer. The effect is to shift income from the retailers, which are taxable in Massachusetts and other separate return states, and shift it to a tax haven state.

Income Shifting Through Transfer Pricing Agreements.

It is common for non-Massachusetts business groups to limit profit attributable to in-state activities through transfer pricing agreements between affiliates. In general, Massachusetts operations are segregated in a separate legal entity, which buys from or sells to its affiliates. The profit attributed to the local entity is based only on its physical assets and payroll in the state, plus a mark-up, while all intangible value from the product is treated as outside of the state.

Example. Cambridge Brands. In this case, a Massachusetts candy manufacturer and its trademarks and tradenames were acquired by an unrelated buyer. The company made candies such as Junior Mints, Charleston Chew, Sugar Daddy, Sugar Babies, and Pom Poms. The buyer contracted to purchase the physical manufacturing plant in Massachusetts, which made the candy. The manufacturing company was separated from the trademarks and trade names, which were placed in an out-of-state company. After the sale, the manufacturing facility was attributed a small profit based on its physical operations, but profits attributable to the trademarks and trade names were attributed to the out-of-state entities, even though these candy tradenames had historically been associated with the acquired Massachusetts operations, and even though the candies were still made at the Massachusetts facility. Although DOR challenged the structure, it was upheld by the Appellate Tax Board and Appeals Court.

Captive Employee Leasing Company

Under separate company filing, each corporation determines its own income and, if doing business in multiple states, apportions the income to Massachusetts based on the percentage of the company's property, payroll, and sales that are in the state. This means that if the percentage of the individual company's Massachusetts employees is reduced, the company pays less tax to the Commonwealth. In a recent case, a major publicly-traded corporation paid most of the employees through a separate affiliated corporation that "leased" the employees to the operating entity. The employees then performed services for the operating entity, but were not included in the operating company's payroll for apportionment purposes. The Department recently settled this matter, receiving payment from the taxpayer for \$37 million.

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