

Improving the Business Climate of the State of Pennsylvania¹

Tracy C. Miller

Grove City College

INTRODUCTION

For the last few decades, the state of Pennsylvania has grown more slowly than the rest of the nation. This is evident in several key economic performance indicators. Between 1991 and 2004, the population growth rate in Pennsylvania was 48th among the 50 states and personal income growth ranked 47th (Commonwealth Foundation, 2005). Between 1980 and 1998, Pennsylvania employment growth ranked 45th in the nation and labor force growth was 47th (Pennsylvania Economy League, 1999).

What explains the relatively poor economic performance of the state of Pennsylvania and what can be done to improve it? Several economic development organizations as well as conservative think tanks blame the poor economic performance of the state on a variety of government policies and institutions that raise the cost of doing business in Pennsylvania. High business tax rates are commonly cited as an important culprit, along with excessive government regulation and the legal climate of the state. If Pennsylvania is going to provide an environment that is attractive to dynamic and innovative firms, it must have not only tax reform, but also market-oriented reforms that will limit regulation and state government expenditures while facilitating the efficient provision of vital services such as education and transportation.

This article uses theory and evidence to explore the links between public policy and economic growth in Pennsylvania. The first section contains a review of the literature on the relationship between tax policy, government spending, government regulation, and state economic growth. Following this is a theoretical discussion of what is likely to drive economic growth and prosperity in today's information economy. The third section discusses tax, spending and regulatory policy in Pennsylvania. The last section contains recommendations for improving the business climate of the state of Pennsylvania.

LITERATURE ON BUSINESS CLIMATE

State and local officials and business people have long been concerned about how to create a climate that will attract industry and promote growth at the state level. According to Plaut and Pluta (1983), many define a good business climate as one in which taxes are low, right-to-work laws are in place, unions are not very active, and government cooperates with business. Several variables have been considered as affecting state business climate, including tax rates, the type of taxes collected, the level of government transfer payments, spending on infrastructure and education, the legal environment, and government regulatory policy.

There are a range of viewpoints about how to achieve sustained and widespread prosperity in today's global economy. On one side, groups such as the Brookings Institution (2007) emphasize the role that state and local governments can play in attracting industries and firms through government spending on education and training and subsidies targeted to attract firms that will provide high paying jobs. In emphasizing the beneficial role of government spending for economic growth, Fisher (1996) and Lynch (2004) claim that differences in tax

¹ I would like to thank Jeff Herbener for helpful comments and my Center for Vision and Values intern Jared Walczak for assistance with this research.

rates and regulatory policies between states have too small an effect on the marginal rate of return to investment to matter much for firm locational decisions.

Opposing the above viewpoints are those who see freedom and free markets as the basis for widespread prosperity. This alternative view emphasizes the importance of limiting the costs of doing business that result from state government tax and regulatory policy. New businesses are more likely to be created and existing firms are more likely to locate and expand their facilities in places where taxes are low and regulations few. Taxes reduce the marginal returns from investment. Regulation raises cost by restricting the options available to firms. Proponents of this view argue that higher taxes and spending do not necessarily translate into higher quality government services. Likewise, though regulation sometimes yields benefits, it often does not do so in a cost effective way. Though other factors may be more important than taxes and regulation in determining where a business will locate, high tax rates and costly regulations can be decisive factors for businesses choosing between two otherwise attractive locations. In today's highly competitive global economy, many firms have numerous options to choose from, and relatively small differences in the cost of doing business can make a difference.

Evidence on the Effect of Taxes

Evidence from many studies suggests that taxes retard economic growth (Dubay and Atkins, 2006). It is less clear which taxes matter the most, how each tax affects growth, or how much taxes reduce growth. Taxes may affect growth by influencing the number and skill of the people who choose to live in a state. Taxes also influence business investment and hiring decisions.

One of the difficulties associated with estimating the effect of taxes on economic growth is the endogeneity of some tax rates, which means that their level depends on economic conditions, such as the amount and type of business investment. If, for example, states that have an easier time attracting business investment tax those businesses more heavily as a result, this will offset any negative effect that taxes have on investment. This may explain why some studies do not find that higher taxes discourage investment, even though economic theory predicts such an effect.

In a model explaining the effect of corporate tax policy on foreign direct investment, Agostini and Tulayasathien (2001) use a statistical procedure to account for the impact of economic conditions on tax policy. This method yields more significant results than treating tax policy as an independent variable. They find that each one percent increase in marginal tax rates on corporate income causes foreign direct investment in the state to decline by about one percent.

One common way to compare the business tax climate of different states is to use an index of tax competitiveness. The most widely used index of competitiveness is that constructed by the Tax Foundation (Dubay and Atkins, 2006). This index consists of a weighted average of five components-- corporate taxes, individual income taxes, sales and gross receipts taxes, unemployment insurance taxes, and wealth taxes, with greater weights for those taxes that vary more between states. The unemployment insurance tax, for example, has a low weight because it varies less between states than the individual income tax rate, which is given the highest weight in the index.

The 2003 Tax Foundation index is more successful than most other indices of business climate in explaining differences in growth between states (Bittlingmayer, Eathington, Hall and Orazem, 2005). Lower taxes are associated with faster growth in the wage bill and employment during all but one ten year period between 1970 and 2002. Lower values of the tax foundation

index are also associated with faster population growth during each period and greater proprietorship growth during two ten year periods.

Rather than keeping tax rates low for all businesses, a common approach to state and local economic development is to try to attract new firms or motivate existing firms to stay using targeted incentives. This involves providing general incentives to all firms that satisfy certain criteria, area-specific incentives to qualified firms operating in a specified location, or firm-specific incentives that are negotiated with individual firms (Lynch, 2004). The first two types of incentives include property tax abatements, sales tax exemptions, and investment or job creation credits against income taxes and are usually given to firms that expand or construct new facilities or hire additional workers. In addition to tax breaks, state economic development programs attract firms by providing subsidized loans or grants for site preparation, public and private infrastructure development, land acquisition, job training, and the purchase or upgrading of machinery and equipment

There have been several empirical studies of targeted incentives programs. Fisher and Peters (1996) find that there are substantial differences in investment returns across states and cities due to the various subsidies and tax breaks offered to promote economic development. Greenstone and Moretti provide some evidence that winning large plants through competing incentive offers may increase local welfare. Bond (1981) finds evidence that tax holidays led to increased turnover of firms in Puerto Rico. If because of temporary incentives, firms do not expect to remain as long in a given location, they will invest less in durable capital goods. They might also invest less in human capital. Thus low taxes that are permanent will attract more investment than temporary tax reductions or subsidies, which favor new but transitory firms over more established firms.

Evidence on the Effect of Government Spending

One reason why some studies find that higher state and local taxes do not reduce economic growth is because the studies do not control for differences in state expenditure priorities. Mofidi and Stone (1990) find a significant negative effect of taxes on net investment and employment in manufacturing when revenues are devoted to transfer payments. Holding taxes constant, increased expenditures on health, education, and public infrastructure is associated with more net investment and employment.

Studies of the relationship between the level of government spending and economic development have shown less consistent results. A study of the effect of state government expenditure policies on economic growth from 1964-1984 found no significant relationship between total government spending per capita and growth, although the composition of government expenditures helps explain the change in employment or income in some of the regressions (Jones, 1990).

Fisher (1997) reviewed a number of empirical studies of the effect of spending on public services on economic growth. More than other public services, spending on transportation services, particularly highway facilities, improves economic development (Fisher, 1997). The results are statistically significant in just over half of the cases. A greater proportion of those studies that use a physical measure of highway facilities, rather than a measure of how much state government spends on highways, show significant effects. Public safety spending significantly increases economic development in less than half of the studies Fisher (1997) reviewed. Results of studies of the effect of education on economic development are less

consistent with only six out of nineteen surveyed by Fisher (1997) showing a significant positive effect.

Jones (1990) finds no consistent relationship between health and hospital expenditures and changes in per capita income across states, observing a significant positive effect during one five year period and a significant negative effect during a later period. In regressions explaining business establishments and changes in employment, he finds that health and hospital expenditures have negative effects more often than positive, though the coefficients are insignificant. Welfare expenditures retard each of the four measures of economic growth during almost every time period. His results suggest that government investment expenditures enhance economic growth, while greater government consumption reduces it. Some types of expenditures, such as education and highway spending, may contain a mix of investment and consumption components.

In deciding how much to invest in an area, businesses are concerned with the quantity and quality of services. Government can spend a large amount on a service such as schooling and yet the quality of education available in an area can be low, which may discourage business investment. The quality of services, such as education and highways, can be high in an area as a result of private provision, even if government spends very little. As with the effect of taxes on investment, regression coefficients may not accurately estimate the effect of government services on growth because causality may go in the other direction. Governments in faster growing areas may spend more on education either because of the type of people that are attracted to such areas or because of a larger tax base. More public safety spending may occur in areas which are growing slowly because of high crime, biasing the estimated effect of public safety spending on economic development downward. In explaining the negative and significant effect of highway expenditures on development shown in their study, Dalenburg and Partridge (1995) suggest that more highway spending may occur in areas where highways are deteriorating and quality is worse than elsewhere.

A recent study by Taylor and Brown (2006) suggests that the impact of growing state and local government spending on infrastructure and services depends on how rapidly that spending increased. During the 1980s, it appears that government spending in many states increased faster than the demand for public services. As a result, faster growth of state government was associated with slower private sector growth. During the 1990s, when state government expenditures grew more slowly, growth in state government services seemed to help private sector growth. Taylor and Brown (2006) also find that states where public capital stocks, such as water and sewer systems and highways, were large or increasing tended to have less private sector output and smaller private capital stocks, holding other categories of spending and some taxes constant. This suggests that devoting more resources to public capital stocks fails to help, and may hurt, private investment. Although their estimated model controlled for the unemployment rate and the manufacturing share of output, there may be other characteristics of states with large public capital stocks that discourage private investment.

The Effect of Regulatory Policy

In addition to state government tax and spending policy, regulatory policy and the legal climate may play an important role in explaining state growth. As noted by Taylor (2006), executive director of the Pennsylvania Manufacturers Association, argues that lawsuit abuse, which depends on the state's legal climate; regulation affecting the difficulty of starting a business; and

regulation affecting the power of labor unions makes Pennsylvania less competitive than other states.

Differences in regulation between states are hard to measure because the effect of regulation on economic development likely depends not just on what the rules are, but how strictly they are enforced. Tannewald (1997) in a review of research on the effect of regulation on economic growth, finds inconclusive results. Most of the studies he reviews find that more stringent environmental regulation reduces economic activity, but the effects tend to be small. Eight of eleven studies he cites on the impact of right-to-work laws find a positive and statistically significant impact on economic activity. Tannewald (1997) notes that because states where most people dislike unions are more likely to enact a right-to-work law, it might not be the law but something else related to attitudes toward unions that effects growth. States where a substantial percentage of the population has a favorable attitude toward unions are unlikely to enact right-to-work laws.

While the above studies provide helpful evidence about the effect of government tax, spending, and regulatory policy on economic growth, they fail to address the more basic question of why some states have higher incomes than others and why the differences have persisted for so long. Bauer, Schweitzer, and Shane (2006) sought to explain long run differences in per capita income across states. They find that public finance variables, including spending on public infrastructure and tax rates, have small effects that are statistically insignificant. Knowledge variables of college, high school attainment, and patents per capita are the most important variables for explaining differences in per capita income growth across states. These results, though instructive, leave an important question unanswered. What role, if any, do differences in state government policy play in explaining differences in educational attainment or the stock of patents across states?

ECONOMIC GROWTH AND PROSPERITY IN THE 21ST CENTURY

Although there is convincing evidence that taxes explain some differences in state economic growth, evidence on the impact of government spending on infrastructure and services is mixed. A better theoretical understanding of how our economic system works is necessary to assess changes that would likely contribute to more economic growth and greater prosperity. Because the economy is changing, approaches that worked in the past may not work in the future.

In order to attract businesses and create jobs, Pennsylvania must have an environment that appeals to the kind of firms likely to do well in the 21st century. Well paying jobs require large amounts of capital investment, and firms will choose to invest in places where they can expect a high rate of return on their investment. A high rate of return is more likely if they can find workers who can be trained to creatively use tangible or intangible capital to produce goods and services that are valued in the marketplace. Thus, it is important to have a good educational system along with an environment that is appealing to creative and well educated workers.

Preserving existing jobs, especially jobs in declining industries, is not the key to economic growth in the future. Evidence from a study of labor markets in the rust belt shows that Metropolitan Statistical Areas with the highest growth rates have high rates of job turnover (Faberman, 2002). Thus, policies to preserve jobs may hinder job creation. Still, keeping existing firms is important. Key industries that have done well because of geographic or demographic characteristics may continue to prosper in the future if state policy does not make it more costly for them to stay than to move.

New jobs are created by entrepreneurs who find ways to develop new markets and new products or services for existing firms, or who create new businesses. These entrepreneurs are more likely to flourish in an environment of private property rights and economic freedom. Taxes are one important factor that affects entrepreneurship and economic growth. High tax rates discourage entrepreneurs from creating or expanding businesses by reducing the benefits they can obtain from work and investment, while restricting their property rights.

Characteristics of a Business Friendly Tax System

Ultimately, taxes affect business both directly, as a cost they must incur to operate in a jurisdiction, and indirectly, as a cost to employees, customers, and families. Whether a state tax system is business-friendly is not just a function of taxes on business activity, but also a function of how the tax affects everyone who might choose to live, work, own assets, or buy goods and services produced in the state. While taxes paid by business firms may have a more direct effect on business location decisions than taxes paid primarily by individuals and families, the latter taxes influence business profitability through their impact on who chooses to visit, shop, live, work, or invest in a state.

One characteristic of a good tax system is its small effect on decisions about employment, investment, and consumption. Smaller effects are more likely if it has low rates and a broad base. In states with high tax rates, prices consumers pay for goods will be high relative to costs of production, and rates of return received by workers and investors will be low relative to earnings. While taxes on corporate profits and assets directly lower the rate of return to investment, other taxes also discourage investment either by raising the cost of living, making an area less attractive for educated and creative workers, or by raising the cost of selling goods and services in the state.

The more taxes reduce the taxed activity, the less revenue they will generate relative to their cost to taxpayers. Taxpayers lose the benefits of the goods they fail to buy or sell, the hours they do not work, and the investments they do not make in response to high tax rates. Government only receives revenue from the goods that continue to be sold, the hours that people continue to work, or the amount they still invest in spite of high tax rates. The difference between the cost to taxpayers and the revenue received by government is the deadweight loss from taxes. That higher tax rates result in a more than proportionate increase in deadweight losses can be demonstrated mathematically. This is because higher tax rates decrease the amount of taxed activity and increase the size of the net loss to society for each additional unit by which the activity decreases.

Besides causing deadweight losses, taxes are also costly to administer. Taxpayers must spend time calculating how much they owe and sending their taxes to the appropriate government agency. Adding new activities to the tax base means that additional government employees must be hired to gather information about how much taxpayers owe and to apprehend those who are not paying what they owe. To limit these administrative costs, it is better to tax a limited number of different types of activities, especially those whose value government can easily assess.

State and local governments tend to rely most on retail sales taxes, income taxes, and property taxes (US Census Bureau, 2007). Each of these taxes has advantages and disadvantages. Retail sales taxes as well as property taxes are transparent and increase government accountability (Mikesell (1998), Youngman (1998)). Sales taxes also have relatively low administrative and enforcement costs (Brunori, 1998).

Although it has often been the subject of intense controversy, financing local spending by a property tax has some advantages (Oates, 2001). A property tax is the price one must pay to live in a locale. Under certain conditions, such as the existence of a zoning law that specifies minimum lot sizes, property values will reflect the expected benefits of living in a community net of expected property tax payments (Zodrow, 2001). The typical homeowner pays taxes in proportion to benefits expected from the local government. Fischel (2001) provides persuasive evidence that to the expected net benefits from property taxes and local government spending are capitalized into property values. He also summarizes evidence that court-mandated school finance reform, which resulted in many school districts relying less on local property taxes for school financing, has resulted in less efficient provision of education. When local property taxes provided most funding for schools, property owning voters in a district, regardless of whether they had children, had an incentive to vote for efficient school spending because home values are higher with well managed schools.

Although the property tax is part of the cost of living in a community, the amount of tax paid has no necessary connection to the value of benefits received from the local government. This is because local residents are likely to have heterogeneous preferences for local public services that are unrelated to the value of the property that they own (Zodrow, 2001). Some may attach a higher value than others to an expansion of a local park or improvements to the public library, yet all pay the same property tax rate. Those who own more property pay more in taxes than others yet may not receive more benefits from local government spending. For this reason, high property tax rates discourage investment in capital, lowering the productivity of land and labor.

If spending on local government services primarily benefits households rather than businesses, high property taxes are likely to discourage business investment, particularly for businesses that use lots of land and fixed capital. Property taxes especially burden start-up businesses because the amount of property tax a business owes is not directly tied to profit they earn during a given period. They still must pay property taxes even if profits are zero or less.

Because state and local governments rely heavily on the above taxes, reducing any one of them would be difficult politically and financially. Changes in the economy have made it more difficult to rely on sales taxes because people are spending a smaller share of their income on goods that are subject to the sales tax (Mikesell, 1998). They are able to avoid paying taxes on many goods purchased over the internet while spending more of their income on services, which have not been subject to sales taxes. In response, some states have been expanding the retail sales tax base by including more services in the base.

For financing state and local government, personal income taxes are almost as important as property and sales taxes. Reducing sales taxes or local property taxes and raising income taxes will tend to shift more of the tax burden to those who earn high incomes, especially if the income tax is progressive. Though most state income tax rates are low enough that they do not distort work or investment decisions much by themselves, the combined effect of state and federal income tax rates can reduce incentives to work and invest substantially. States with no state income tax can attract professionals and entrepreneurs more easily than states with high marginal income tax rates.

The corporate income tax generated about four percent of state tax revenue in the United States in 2004-05 (US Census Bureau, 2007). This tax could be eliminated and the revenue replaced with moderate increases in state sales or income taxes. Although it may not be politically possible to eliminate the corporate income tax, lowering it need not cause a large

decline in revenue in states where the tax rate is relatively high. Atkins (2005), writing for the Tax Foundation, argues that states trying to keep the corporate income tax are fighting a losing battle. Competition has caused state governments to use a variety of incentives, such as single sales apportionment, that reduce corporate tax revenues in order to attract business investment. They do this while trying to use other gimmicks such as throwback rules to increase taxes paid by corporations. With single sales apportionment, corporations pay state taxes in proportion to the sales they have in the home state. With throwback rules, the home state also collects taxes on their sales in other states that have no corporate income tax. The combined effect of states competing for investment by limiting corporations' tax liability while vying for as much revenue as they can from each corporation makes this tax particularly inequitable and reduces revenue relative to costs of compliance and administration.

Some would argue that the key to providing a more hospitable business climate is to use a more efficient mix of taxes, allowing state government to obtain the same revenue with less deadweight and administrative costs. This could be accomplished by reducing property or corporate tax rates, while expanding the sales tax base to include services and internet transactions. In some states, moderate increases in personal income tax rates with lower property taxes and corporate tax rates would raise after-tax rates of return, making those states more attractive locations for business investment.

Improving the efficiency of the tax system without reducing government expenditures is unlikely to improve the business climate in the long run. Political pressure to raise state government expenditures and to make unrealistic promises to government employees is intense. The propensity of governments to increase spending is limited primarily by the difficulty they have in raising taxes. Unless there is a corresponding increase in benefits to local taxpayers, it may be easier politically for the state government to raise state income tax rates or the sales tax base than for local governments to raise property tax rates. With local property taxes, local government agencies such as school districts have an incentive to be efficient by keeping costs down and providing the quality of service desired by taxpayers. Evidence suggests that replacing local property tax financing with state funding of local government services results in less efficient provision of those services (Duncombe and Yinger, 2007).

Reforming the tax system to reduce deadweight and administrative costs is not likely to be in the public interest. Greater tax efficiency may make it easier to raise taxes, but the additional revenue is likely to be spent on programs of dubious benefit to the public. If, on the other hand, the tax base is limited and the government relies on taxes that are hard to raise and bring in less revenue, state governments will be more constrained in their spending. As a result, either they will have to make more efficient use of the limited revenue they have, or they will need to find another way to fund some government services such as local property taxes or user fees. In either case, citizens will likely get more for their money.

Using Targeted Tax Incentives and Subsidies to Attract or Retain Firms

With state government spending rising steadily, it may not work to reduce the overall level of taxes. Instead, states offer tax cuts selectively or provide subsidies to benefit firms that invest locally. Should targeted tax incentives be an important element of state programs to improve the climate for business? Glaeser (2001) argues that unless the tax incentives are driven by corruption and political influence, economic theory suggests that they should result in firms locating where they will generate the most net benefits. In this view, governments will give tax incentives in proportion to the expected external benefits that firms will generate. One way new

firms bring external benefits is by attracting skilled workers who may share their knowledge with workers in other nearby firms.

Given the high level of taxes on business, targeted tax incentives, although not as good as a tax reduction for everyone, may be a step in the right direction. Subsidies are different. Even if government expects the subsidy to be paid back through future tax revenue, there is a chance that it might not. Government often spends money to develop infrastructure such as industrial parks in the hope of attracting new firms before any firm has agreed to locate there. This kind of risk-taking is better left to private entrepreneurs who are better able to predict the most profitable location for new firms. Information is costly to obtain, and there is no reason to expect that state or local economic development officials will be able to make accurate calculations about the net benefits of investing in a particular location. Since they would be investing taxpayers' money rather than their own into the economic development program, they also would lack the incentive to accurately estimate net benefits.

Whether they offer lower taxes or subsidies, when state governments offer selective incentives to new or expanding firms, those firms often create jobs at the expense of competing firms located elsewhere in the state. By selectively benefitting new or expanding firms at the expense of existing firms, these programs may create uncertainty about the ability of existing firms to be able to compete, thus discouraging them from committing to long term investment projects unless they too can share in the tax breaks or subsidies.

Even if it could be proven that state economic development incentive programs result in the creation of well paying jobs for local workers, those programs have a negligible impact because, given limited government budgets, tax breaks and subsidies can motivate firms to create, at most, a few thousand jobs per year. This is much less than the net number of jobs added in a good year, but, more importantly, it is dwarfed by the total number of jobs created. In any year, many jobs are created, but many are also lost, with the difference being the net increase or decrease in employment. If Pennsylvania is comparable to the rest of the US, the total number of jobs created in the state is likely greater than 500,000 per year (Spletzer, Faberman, Sadeghi, Talan and Clayton, 2004). At best, then, state economic development programs change the total number of jobs created by less than one percent. By contrast, every firm, as well as its employees and potential employees, will be affected by the overall level and mix of taxes, and the quality of the infrastructure and educational system within a state.

Controlling Government Expenditures while Providing Adequate Services

Although low tax rates may be attractive to business, the taxes are used for may be at least as important as the level of taxes. The quality of existing infrastructure and services, such as education and public safety, are important for attracting and retaining businesses that pay well. Keeping transfer payments low is important not only for making low taxes sustainable, but also for freeing up revenue to be used for infrastructure and other important government services. Government spending on infrastructure can be kept down if improvements in infrastructure required by new or expanding businesses are paid for by those businesses.

More generally, providing high quality services, such education and highways, need not involve high levels of government spending. It is possible to provide high quality education that prepares the next generation well for the new economy without spending as much per pupil as many school districts spend. While increasing public school funding sometimes results in improved educational outcomes, it depends on how the money is spent. In reviewing almost 400 studies of student achievement, Hanushek (1997) finds no strong or consistent effect of school

resources on student performance. Rather than spending more on ineffective teachers or schools, the system needs to be reformed to better reward successful teachers and schools and penalize those that are not. Creativity and innovation to meet the needs of a changing economy are more likely to arise in a competitive environment, which could be promoted by encouraging further development of charter schools and providing vouchers or tax credits so that parents, even with limited incomes, have more freedom to choose the school their children attend. Having to compete for students, with revenue tied to the number of students attending, would increase pressure on poorly performing schools to find ways to improve the quality of their education.

As with education, paying for public infrastructure with tax revenue is not necessarily cost effective. Major highways that are poorly maintained or excessively congested make a state less attractive to workers and businesses. Raising gasoline taxes to build more highways or spending more on public transportation might not solve traffic congestion problems. By contrast, privately operated highways with tolls reflecting congestion costs would give drivers an incentive to consider alternative modes of transportation while providing funds necessary to maintain and expand highways where they are most needed. Given the choice between driving and paying a toll related to highway congestion or using public transportation, commuters would make decisions that more accurately reflect the costs their actions impose on others and public transportation could be more nearly self supporting in densely populated areas.

Private owners of infrastructure would have more incentive than government to build high quality facilities and consistently maintain them. This would enable them to attract more paying users in order to maximize their profits and increase the market value of their assets. When infrastructure is funded by government through taxes, there is not a comparable incentive to maximize the net benefits from that infrastructure, since votes are not distributed in proportion to taxes or benefits from government services.

A variety of different government services and infrastructure could be more efficiently provided if those who were qualified competed for the right to provide the service. Competition among local governments is also more efficient than state or federal government provision. Local voters are more likely to exercise careful oversight of programs funded entirely with their tax money rather than those supported by grants from the state or federal government.

Greater competition in the provision of services like education and highways is likely to result in lower costs to achieve any desired level of quality, freeing up funds for government to provide what many view as necessary transfer payments and to meet existing pension and health care obligations to retired government workers.

PENNSYLVANIA TAX, SPENDING, AND REGULATORY POLICY

According to the Tax Foundation's 2007 State Business Tax Climate Index, Pennsylvania ranks 22nd overall (Dubay and Atkins, 2006). The two worst tax categories for Pennsylvania are corporate taxes, for which Pennsylvania ranks 42nd, and property taxes, for which the state ranks 44th. The two best index values are for the individual income tax for which Pennsylvania ranks tenth, and the unemployment insurance tax, for which Pennsylvania is ranks thirteenth. The state dramatically improved in its unemployment tax index between 2003 and 2004, with its rank rising from 43 to 12.

Critics of the business tax climate in Pennsylvania often emphasize the high level of the corporate net income tax and the corporate stock franchise tax in the state. Pennsylvania is one of the few states that have both of these taxes (Guliban, 2006). Because these two taxes are imposed on the income and assets of corporations that do business in the state, they may

influence corporate location decisions more than other taxes not directly imposed on corporations.

The mix of taxes levied in Pennsylvania has different effects on the attractiveness of investment in Pennsylvania for different types of business. For example, non-profit hospitals, which pay no tax on property or corporate income, find the state very attractive (Allegheny Institute, 2007). Reducing property and corporate income taxes for all firms would attract other types of businesses as well. Pennsylvania's tax system has a more negative effect on "cyclical" businesses, businesses "that may experience wide swings in profitability over a time period" (Guliban, 2006). Such firms, which make up a significant share of the state economy, find Pennsylvania less attractive because it is one of only two states that limit the amount of past net operating losses that can be deducted in calculating current tax liability (Dubay and Atkins, 2006).

The Tax Foundation Business Tax Climate index has been criticized for not accurately ranking the states according to what is of greatest concern to businesses. Tannewald (1996) suggests that firms are most concerned about the after-tax rate of return to investment, which is not directly related to the value of the Tax Foundation index. He estimates the effect of taxes on the after tax rate of return of hypothetical firms representative of selected industries from various sites around the nation. Using data from selected cities in 1986 and 1993, he finds that some cities in states that receive low ranks according to most tax climate measures, such as Poughkeepsie, New York and several cities in Massachusetts, do well in after tax rate of return to investment compared to competitor cities. Of the sixteen sites Tannewald considered, the one site located in Pennsylvania, Bala Cynwyd, ranked sixteenth in all but one of six measures compared to sites in competitor states such as Maryland, Massachusetts, Illinois, and Connecticut. Pennsylvania also ranked second from the bottom in a 22-state sample based on after-tax marginal rates of return to investment. One reason Pennsylvania ranked low was its high unemployment insurance taxes at the time of the study (Tannewald, 1996).

Although taxes on business are relatively high overall, Pennsylvania, like other states, has a number of economic development programs whereby the state seeks to attract businesses through tax breaks or subsidies. Pennsylvania spends _____ rates for economic development (Pennsylvania Legislative Budget and Finance Committee (2002)). The various economic development programs provide grants and loans for such purposes as site preparation, public and private infrastructure development, land acquisition, small business development, research centers, job training, and the purchase or upgrading of machinery and equipment (Behr, Christofides and Neelakantan (2003), Association of Independent Colleges and Universities of Pennsylvania(2007)). While most of these programs are intended to help economically depressed areas, it is not clear that the distribution of funds is consistent with that goal. Given the incentives they face, there is no reason to think that state officials would equitably distribute revenue to those areas most in need of economic development or that the result of their efforts would be a locational pattern of firms that would generate the greatest total benefits for society.

By subsidizing development in selected locations, this policy likely has caused some businesses to relocate within the state, thus not really benefiting state residents in the aggregate (Brookings, 2007). For example, subsidies made available through the state tax increment finance program to support retail development draw customers away from existing retail facilities, redistributing rather than creating new jobs (Allegheny Institute, 2006). Taxpayers bear the cost, but there is no real benefit to the state economy as a whole. Even favored parts of

the state appear to have benefitted little. Though Pittsburgh has received economic development funding that is much higher than the state average on a per capita basis, the total number of private sector jobs in the Pittsburgh metro area declined by 18,000 between 2000 and 2007 (Behr, Christofides and Neelakantan (2003), Allegheny Institute (2007)).

Some would defend state tax policy by emphasizing that high taxes pay for high quality government services, which make the state more attractive to business. This position is not supported by the evidence. For example, educational spending per pupil in Pennsylvania is the tenth highest in the nation (National Center for Education Statistics, 2006). Based on test scores, however, Pennsylvania schools rank slightly below average for the U.S. Pennsylvania students in all grade levels perform at roughly the same level as other American students. When compared to students in other countries, American students perform progressively worse the longer they stay in school, so that by the twelfth grade American students rank 19th out of 21 countries in math and 16th in science (Coulson, 2003).

Some promising recent developments, such as the growth of charter schools, may enhance the quality of education in Pennsylvania. Data comparing charter and non-charter schools serving students with similar characteristics does not show superior performance for students attending charter schools (Coulson, 2003). More time is necessary for enough evidence to accumulate to judge the effectiveness of charter schools. Nevertheless, it is possible to evaluate charter schools in light of known characteristics of effective schools. One advantage of charter schools is that they have more autonomy than traditional public schools. There are, however, a number of requirements that they must satisfy, such as the requirement that 75% of their teachers be state-certified. While they enjoy more discretion in the allocation of budgets, an effective charter school cannot charge more per student than a mediocre one.

Though they may be a step in the right direction, current reforms, such as charter schools, will not do enough to improve education in Pennsylvania. Coulson (2003) notes that there are a number of barriers to the spread of effective schools in this and most other states. These barriers result from the centralized bureaucratic educational system. This system fails to provide incentives to match teachers with schools where they will be most effective, discourages parental involvement and does not do much to reward good performance or penalize poor performance of teachers and schools. Administrators of government funded schools are unlike private school administrators in that they are not paid market wages. If they faced market competition, effective schools would survive and grow, while ineffective schools would be unable to attract students and eventually shut down. Public schools would face much more competitive pressure if government offered tax credits or vouchers so that parents could freely choose the school, whether public or private, that is best for their children.

Besides blaming the overall level of taxes and the quality of government services, some have blamed the fragmented system of local governance in Pennsylvania for economic and fiscal decline (Rusk, 2003). Larger jurisdictions may be more efficient if there are economies of scale resulting from their being able to spread the fixed costs of providing government services over a larger population. There are several problems with this view. If there are economies of scale, there is no reason why several local governments cannot contract with each other to provide the service on a larger scale. Also, if there are many small governments competing with each other to attract residents and businesses, each will face pressure from local voters to efficiently manage the services that are funded with local tax revenue.

It is not just current tax policy that influences business location and investment decisions, but also expected future tax policy. The Pennsylvania state legislature has debated some tax

reform proposals that could benefit business. Governor Rendell seems to agree in principle that reducing the corporate net income tax and capital stock franchise tax is important. He appointed a commission to consider business tax reform, and the commission proposed cutting the corporate net income (CNI) tax from 9.99 to 6.99 percent and to continue phasing out the capital stock and franchise tax (Pennsylvania Business Tax Reform Commission, 2004). During the years that Rendell has been in office, state spending has increased by five to six percent per year (Barnes, 2007). Such increases, which exceed the rate of inflation, make it difficult to reduce any tax unless some other tax can be raised by enough to make up the difference and provide the additional revenue to fund proposed spending increases. Given voters' likely resistance to an increase other taxes, the CNI tax is not likely to be cut if state spending continues to grow as rapidly as it has in the last few years.

Besides trends in state and local taxes and current spending, a troubling issue in Pennsylvania, as in many other states, is promises that have been made to pay pensions and health care expenses for retired state and local government employees. While the state has made progress in setting aside funds to cover expected pension costs for retired state government and public school employees, state and local governments have not set aside funds to cover expected retiree health care liabilities. The Rendell administration estimates the present value of state government retiree health care costs at \$14 billion (Dreyfuss, 2007). These costs are becoming especially burdensome because people are living longer after they retire and health care costs are rising faster than inflation. If there is little or no growth in state population of working age, paying the rising cost of retiree benefits in the future will require that spending on other programs be reduced, taxes increased, or both.

Government regulation in Pennsylvania is also a problem. As part of the Pacific Research Institute's (PRI) Economic Freedom Index, the state ranked 43rd out of 50 in its regulatory environment in 2004 (Huang, McCormick and McQuillan, 2004). Factors that enter into the PRI ranking of a state's regulatory environment include occupational licensing, continuing education requirements for selected professions, right to work and prevailing wage laws, worker's compensation laws, environmental regulations, regulation of guns, and public utility regulation. Although some regulation may be cost effective, most occupational licensing regulations and laws affecting wages raise costs of labor, making firms that do business in Pennsylvania less competitive. Reducing or eliminating such regulations would clearly make the state more attractive to firms and workers.

Along with regulatory policy, unfunded liabilities of state and local governments contribute to uncertainty about expected rates of return to investment. It is hard to predict the magnitude of future tax increases or cuts in government services that will be required to pay for promised retiree health care and pension benefits. As much or more than current high costs of doing business, uncertainty about future tax policy and government solvency is likely to discourage investment in Pennsylvania.

CONCLUSIONS

Pennsylvania has made some progress in improving its business climate since the 1980s. Corporate taxes, however, are still high, and property taxes are high in many parts of the state, making the state unattractive to some types of businesses. In addition, transportation infrastructure and education are not of high enough quality to make Pennsylvania locations as desirable as states with lower taxes to firms or skilled workers.

Much of what Pennsylvania is now doing to promote economic development involves inefficient uses of taxpayer money. Many of the programs that use state money to promote economic development at the local level likely do more harm than good. In many cases, they benefit one area of the state at the expense of others. Besides reducing taxes on business, an important step in promoting efficient development to benefit residents of older cities and towns is to remove the existing regulatory barriers and liability rules that discourage redeveloping abandoned industrial sites.

Some changes which could potentially improve the business climate of the state, like the enactment of a right-to-work law, seem politically infeasible. The political power of unions is simply too great for this to have a chance of passing in the near future. Furthermore, it may be attitudes toward unions, rather than actual laws, which make a state more or less attractive to business. Because of the long term trend of declining union membership, firms considering where to locate have less reason to worry about unions even in states without right-to-work laws. Public sector unionism, however, may be more of a concern, especially if it continues to grow and raise the cost of state and local government programs.

Pennsylvania has room for improvement in several key areas. Business tax rates are too high relative to competitor states. The combination of the capital stock and franchise tax along with the corporate net income tax makes Pennsylvania less attractive than other states to many large businesses. If these taxes can be reduced without major increases in other tax rates or reductions in the quality of education or transportation infrastructure, the state's prospects for achieving at least moderate growth would improve. Businesses willingness to invest to facilitate growth may also depend on how confident they can be that taxes won't increase or vital government services won't be cut sharply in the future. To reduce uncertainty about future tax policy, state government must find a way to more accurately account for and set aside funds to cover promised pension and health care benefits of cur e.

Economic growth is something that should not be taken for granted. It requires an environment of economic freedom where entrepreneurs can expect an after-tax marginal rate of return to their investments that is not much lower than the before tax rate of return. It also requires a dynamic economy where affordable and high quality education and training are available and flexible enough to meet the needs of a diverse population and economy. In addition, businesses and their employees value an infrastructure that is well-maintained and facilitates the mobility and productivity of the population.

High quality transportation networks along with good quality education are critical for future growth in Pennsylvania. Providing these should not necessitate tax increases if they are funded in a way that promotes their efficient provision. To keep taxes from increasing and make it possible to reduce those taxes that are most onerous to businesses, state spending on other programs, such as transfer payments and pensions, needs to be kept under control. In addition, reforms that include privatization of highways, greater reliance on user charges, and tax credits or vouchers for private education could lead to more efficient provision of education, transportation, and other infrastructure.

SOURCES

Agostini, Claudio and Sorphol Tulayasathien. (2001) "Tax Effects on Investment Location: Evidence from Foreign Direct Investment in the US States." Office of Tax Policy Research, University of Michigan Business School.

- Allegheny Institute (2006, September 19). "Predictable Effects of Tax-Supported Mega Malls Come to Light" 6 (48).
- Allegheny Institute for Public Policy. (2007, June 1). "Where are the Promised Jobs in the Pittsburgh Region?" 7 (29).
- Association of Independent Colleges and Universities of Pennsylvania. (2007, July 30). "Pennsylvania Budget Breakdown: What does the new State budget contain that may impact AICUP member's economic development projects?" E-mail to the author.
- Atkins, Chris. (2005, September). "A Twentieth Century Tax in the Twenty-First Century: Understanding State Corporate Tax Systems." Tax Foundation Background Paper 49.
- Barnes, Tom. (2007, June 3). "Budget Stalls Over Spending Disputes". *Pittsburgh Post-Gazette*.
- Bauer, Paul W., Mark E. Schweitzer, and Scott Shane. (2006) "State Growth Empirics: the Long Run Determinants of State Income Growth". Federal Reserve Bank of Cleveland working paper 06-06.
- Behr, Todd, C. A. Christofides, and Pats Neelakantan. (2003). "The Spatial Allocation of Pennsylvania's Major Economic Development Programs." Business Economic Research Group, East Stroudsburg University.
- Bittlingmayer, Gregory, Liesel Eathington, Arthur Hall and Peter F. Orazem. (2005), "Business Climate Indexes: Which Work, Which Don't and What Can They Say About Kansas?" The Center for Applied Economics: Kansas University.
- Bond, Eric. (1981). "Tax Holidays and Industry Behavior". *Review of Economics and Statistics* 63(1): 88-95.
- Brookings Institution. (2007). "Committing to Prosperity: Moving Forward on the Agenda to Renew Pennsylvania." Brookings Institution Metropolitan Policy Program.
- Brunori, David. (1998). "Introduction" in the *Future of State Taxation*.
- Commonwealth Foundation for Public Policy Alternatives (2005, Nov. 8), "Pennsylvania's Spending Limitation Bills: An Opportunity for Economic Growth in the Commonwealth."
www.commonwealthfoundation.org/dsp_article_print.cfm?articleType=30&articleID=1318
- Coulson, Andrew J. (2003). *Reinventing Education in Pennsylvania: Fulfilling the Promise of Public Schooling*. Commonwealth Foundation. www.commonwealthfoundation.org
- Dalenburg, Douglas and Mark D. Partridge. (1995). "The effect of taxes, expenditures, and public infrastructure, on metropolitan area employment." *Journal of Regional Science* 35 (4):617-40.

- Dreyfuss, Richard C. (2007, May 17) "Over-Promised Health Care Benefits" Commonwealth Foundation for Public Policy Alternatives.
- Dubay, Curtis S., and Chris Atkins. (2006, October) "2007 State Business Tax Climate Index." Tax Foundation Background Paper 52.
- Duncombe, William and Yinger, John. (2001). "Alternative Paths to Property Tax Relief" in Oates, Wallace E., ed. *Property Taxation and Local Government Finance*. Cambridge, MA: Lincoln Institute of Land Policy, 243-294.
- Faberman, R. Jason. (2002, September). "Job Flows and Labor Dynamics in the US Rust Belt." *Monthly Labor Review* 125 (9).
- Fischel, William A. (2001) "Municipal Coporations, Homewoners and the Benefit View of the Property Tax" in Oates, Wallace E., ed. *Property Taxation and Local Government Finance*. Cambridge, MA: Lincoln Institute of Land Policy, 33-77.
- Fisher, Peter S. and Alan H. Peters. (1996) "Taxes, Incentives and Competition for Investment." *Region* 10 (2)
- Fisher, Ronald.(1997). "The Effect of State and Local Public Services on Economic Development" *New England Economic Review* (March/April): 53-67.
- Glaeser, Edward L. (2001). "The Economics of Location-Based Tax Incentives." Harvard Institute of Economic Research, Discussion paper 1932.
- Greenstone, Michael and Enrico Moretti. (2003) "Bidding for Industrial Plants: Does Winning a 'Million Dollar Plant' Increase Welfare?" NBER Working Paper 9844.
- Guliban, Grant R. (2006). "Pennsylvania's Business Tax Climate: Current Competitive Issues and Prospects for Reform," Allegheny Institute for Public Policy.
- Hanushek, Eric A. (1997) "Assessing the Effect of School Resources on student performance: an update. *Educational Evaluation and Policy Analysis* 19(2).
- Huang, Ying, Robert E. McCormick, and Lawrence J. McQuillan. (2004). "US Economic Freedom Index: 2004 Report." Pacific Research Institute. www.pacificresearch.org
- Jones, Bryan D. (1990) "Public Policies and Economic Growth in the American States". *Journal of Politics* 52 (1): 219-233.
- Lynch, Robert G. (2004). "Rethinking Growth Strategies: How State and Local Taxes Affect Economic Development." Economic Policy Institute.
- Mikesell, John L. (1998). "The Future of American Sales and Use Taxation" in Brunori, David, ed. *The Future of State Taxation* Washington, DC: Urban Institute Press.

- Mofidi, Alaeddin and Joe A. Stone. (1990). "Do State and Local Taxes Affect Economic Growth?" *The Review of Economics and Statistics* 72(4): 686-91.
- National Center for Education Statistics (2005). "Total and current expenditures per pupil in fall enrollment in public elementary and secondary education, by function and state or jurisdiction, 2001-02." http://nces.ed.gov/programs/digest/d04/tables/dto4_165asp.
- Oates, Wallace E. (2001). "Property Taxation and Local Government Finance: An Overview and Some Reflections" in Oates, Wallace E., ed. *Property Taxation and Local Government Finance*. Cambridge, MA: Lincoln Institute of Land Policy, 21-32.
- Pennsylvania Business Tax Reform Commission. (2004). Final Report.
- Pennsylvania Economy League. (1999) "A Comparative Analysis of Major State Business Taxes in Pennsylvania and Other States."
- Pennsylvania Legislative Budget and Finance Committee. (2002). *Department of Community and Economic Development Programs: A Performance Audit in Response to Act 1996-58, p. 192*, cited in Brookings Institution. (2003). *Back to Prosperity: A Competitive Agenda for Renewing Pennsylvania*. The Brookings Institution Center on Urban and Metropolitan Policy, p. 78.
- Plaut, Thomas R., and Joseph E. Pluta. (1983). "Business Climate, Taxes and Expenditures, and State Industrial Growth in the United States." *Southern Economic Journal* 50 (1):99-119.
- Rusk, David. (2003). "'Little Boxes' – Limited Horizons, A Study of Fragmented Local Governance in Pennsylvania: Its Scope, Consequences and Reforms", Brookings Institution Center on Metropolitan Policy.
- Spletzer, James R., R. Jason Faberman, Akbar Sadeghi, David M. Talan, and Richard L. Clayton. (2004, April) "Business Employment Dynamics: new data on gross job gains and losses." *Monthly Labor Review* 127 (4): 29-42.
- Tannewald, Robert. (1996, Jan/Feb). "State Business Tax Climate: How Should it be Measured and How Important is it," *New England Economic Review*, pp. 23-28.
- Tannewald, Robert. (1997, March/April). "State Regulatory Policy and Economic Development." *New England Economic Review*, pp. 83-98.
- Taylor, David. (2006) "Pennsylvania's Underperforming Economy," *Susquehanna Valley Center Policy Brief*. www.susvalleypolicy.org
- Taylor, Lori L. and Stephen P.A. Brown. (2006) "The Private Sector Impact of State and Local Government: Has More Become Bad." *Contemporary Economic Policy* 24(4):548-62.
- U.S. Census Bureau. (2007). "State and Local Government Finances by Level of Government and by State: 2004-05."

Youngman, John M. (1998). "Property Taxes and the Future of Property Taxes" in Brunori, David, ed. *The Future of State Taxation*. Washington, DC: Urban Institute Press.

Zodrow, George R. (2001) "Reflections on the New View and the Benefit View of the Property Tax" in Oates, Wallace E., ed. *Property Taxation and Local Government Finance*. Cambridge, MA: Lincoln Institute of Land Policy, 79-112.