

Fiscal Research Program

**ECONOMIC
DEVELOPMENT
POLICY**

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TABLE OF CONTENTS

	Page
Executive Summary	iv
I. Capital vs. Labor Cost Subsidies	1
II. More Precise Targeting	4
III. Property Tax Abatements at the Local Level	6
IV. The Jobs Tax Credit: A Critique	8
V. Evaluation of Economic Development Programs	10
References	14

ECONOMIC DEVELOPMENT POLICY

EXECUTIVE SUMMARY

Dramatic improvements have been made in the State of Georgia's overall economic development program during the 1990s. When judged against extant empirical evidence, as well as economic logic, the current program has many laudable features (The Governor's Development Council, 1997; Ihlanfeldt, 1995). Nevertheless, it also possesses some important weaknesses which may hinder the achievement of the state's economic development objectives and its ability to compete with other states. These weaknesses fall into five categories: (1) a misplaced emphasis on capital as opposed to labor cost subsidies; (2) poor targeting of the state's economic development incentives; (3) the absence of state monitoring of property tax abatements at the local level; (4) the use of a jobs tax credit having little value to businesses, and; (5) the failure to properly evaluate the state's economic development programs. The purpose is to highlight these weaknesses and recommend policies to overcome them with an eye toward bringing further improvement to the state's economic development program.

Capital vs. Labor Cost Subsidies

Both capital and labor cost subsidies have a place in the state's overall economic development program, but there is an issue whether the existing subsidies are properly placed. Capital cost subsidies are known to attract new investment and capital-intensive industries (Bosworth and Burtless, 1992; Auerbach and Hassett, 1992). Empirical evidence suggests that capital-intensive investment is most compatible with jobs for skilled workers, and that capital generally substitutes for low-skilled workers.

Labor cost subsidies of the type emphasized in Georgia (i.e., tax credits based upon the number of jobs created rather than a subsidy in the form of a percentage of the wage bill) reduces the

cost of lower-paid workers compared to higher-paid workers and encourages the substitution of lower skilled for more highly skilled, better-paid workers.

Due to their differing effects, capital and labor cost subsidies should be targeted as follows: (1) where there is a ready supply of skilled workers or where appropriate training could bring forth such a supply within a reasonable time period, capital cost subsidies should be used, and (2) where jobs are needed for lower-skilled workers, labor cost subsidies are the preferred alternative.

These targeting rules are only partially followed within Georgia's overall economic development programs. Two examples are illustrative. First, the incentive contained in the state's new enterprise zone legislation is the abatement of property taxes, which is a capital cost subsidy. But the primary need within the distressed areas that are eligible for zone designation is jobs for lower-skilled workers. This argues for the use of a labor cost subsidy. Second, firms locating or expanding employment in Georgia can take either a job tax credit or an investment tax credit, but not both. The amounts of the credits are larger and eligibility criteria are weaker in the state's least developed counties, which is desirable. But the relative attractiveness and availability of investment versus job tax credits might also be made to vary across counties, with the latter emphasized in Tier One (least developed) counties.

More Precise Targeting

There are a number of facts relevant to state and local economic development that should be kept in the forefront in deciding which businesses are eligible for tax incentives and other financial subsidies:

- On average, about three-quarters of the jobs created by economic growth go to immigrants from other states and countries (Bartik, 1991).
- Economic development incentives are costly per job created. Bartik (1994) has estimated that the average net government cost per job created by incentives is equivalent to around \$4,000 annually.

- Economic research shows that there are marked differences in the *quality* of jobs across different industries as well as within given industries for workers with similar education, age, and other characteristics.
- Different industries have widely different employment and multiplier effects.

To maximize the benefits of incentives relative to their costs, it is imperative that the state more finely target its incentives. Some targeting is already done. However, in recent years many other states have fine-tuned the targeting of their economic development incentives in recognition of their high costs; Georgia should follow their lead.

Property Tax Abatements at the Local Level

There is no statewide property tax abatement program in Georgia. However, local governments in Georgia frequently employ property tax reductions and abatements to attract employers to their communities. But there are major concerns with these incentives. First, local communities within the state are pitted against one another, which enhances the bargaining power of firms' relative to that of the communities. Second, communities are highly unequal in their ability to offer property tax incentives. Third, there is a common perception, which may or may not be accurate, that some communities are playing unfairly by offering abatements without the legal authority to do so. Finally, there is the concern that some communities are trading better schools and other public services for jobs, which may jeopardize the long-run competitive position of the community and state.

Unfortunately, no information is collected by the state or other entity from local communities on the use of property tax abatements. Georgia should follow the lead of the State of Tennessee and pass a disclosure law that would provide the data necessary for possible statewide reform.

The Job Tax Credit: A Critique

Georgia's principal labor cost subsidy is the jobs tax credit (JTC). Recent evidence suggests that the JTC has little, if any, effect on job expansion or job location within the state. Faulk (1998) found that:

- Over the years 1993-1995 only 0.01 percent of all taxable firms in the state took the JTC.
- The participation rate among eligible firms (i.e., those that had created the minimum number of jobs and sustained them over the required two year time period) during 1993-1995 was only 19 percent.
- On average, among the firms that took the JTC, the savings in labor costs was less than 1 percent.

The first two facts indicate that the JTC program is highly underutilized. There are two possible reasons for this: firms are unaware of the program and/or the net benefits (benefits less costs) from program participation are negligible.

If a labor cost subsidy is to succeed in creating jobs, at a minimum it must be valuable to businesses. A labor cost subsidy more valuable than the current JTC could be constructed in one of two ways: (1) allow the JTC to be taken against other tax liabilities of the business and not just its corporate income tax liability or (2) provide a subsidy per job created rather than a tax expenditure.

Evaluation of Economic Development Programs

Like most other states, Georgia does little to evaluate the cost-effectiveness of its tax incentives and other economic development programs. One approach to evaluation that has grown in popularity is "benchmarking"; benchmarking refer to measurable indicators of progress made toward accomplishing long-run goals, or to both goals and outcomes. Benchmarking was proposed by the Governor's Development Council (Governor's Development Council, 1994), and while it has been introduced as part of the state budget process, a more detailed and extensive benchmarking effort is needed if it is to serve as a basis for evaluation.

Benchmarking has a number of attractive features. First, it forces the state to envision what it wishes to become, an essential element in any long-run plan. Second, it permits progress toward

long-range strategic goals to be monitored. There are also important limitations of benchmarking. First, benchmarking does not directly link the amount of progress to specific state programs or policies; it is therefore limited in its ability to serve as an evaluation instrument. Second, much of the variation in benchmarks over time can be attributed to changes in the national economy.

In addition to benchmarking, there are two other strategies for evaluating state and local economic development programs that are worthwhile, namely, firm surveys and hypothetical firm techniques.

Many of Georgia's economic development programs involve providing services to firms -- information, training, advice, etc. These programs can be evaluated relatively inexpensively by written surveys of the businesses that are clients of these programs, asking them to rate the quality and effectiveness of the assistance they received.

The hypothetical firm technique allows reliable calculations of the relative values of different financial subsidies to firms within a particular industry. Models are built that replicate the operation ratios, balance sheets, and income and tax statements of real, or at least "potentially" real firms. This allows researches to simulate the impact on a firm's income of a state's, city's, or county's taxes and economic development incentives.

ECONOMIC DEVELOPMENT POLICY

Dramatic improvements have been made in the State of Georgia's overall economic development program during the 1990s. When judged against extant empirical evidence, as well as economic logic, the current program has many laudable features (The Governor's Development Council, 1997; Ihlanfeldt, 1995). Nevertheless, it also possesses some important weaknesses, which may hinder the achievement of the state's economic development objectives and its ability to compete with other states. These weaknesses fall into five categories: (1) a misplaced emphasis on capital as opposed to labor cost subsidies; (2) poor targeting of the state's economic development incentives; (3) the absence of state monitoring of property tax abatements at the local level; (4) the use of a jobs tax credit having little value to businesses, and; (5) the failure to properly evaluate the state's economic development programs. This report highlights these weaknesses and recommends policies to overcome them with an eye toward bringing further improvement to the state's economic development program.

I. Capital vs. Labor Cost Subsidies

Georgia relies heavily on both capital and labor cost subsidies as economic development incentives. Examples of capital cost subsidies are: (1) investment tax credits, which were first begun as part of the Georgia Business Expansion and Support Act of 1994; (2) property tax abatements provided by local economic development authorities and within local and state designated enterprise zones; (3) freeport tax exemptions that exempt certain inventories from property taxation, and; (4) sales tax exemptions on machinery and equipment. The state's principal labor cost subsidy is the Job Tax Credit (JTC), but the Retraining Tax Credit, Child Care Tax Credit, Quick Start job training program, and the recently created Intellectual Capital Partnership Program also can be placed in this category because they all reduce firms' labor costs.

Both capital and labor cost subsidies have a place in the state's overall economic development program, but there is an issue whether the existing subsidies are properly placed. Capital cost subsidies are known to attract new investment and capital-intensive industries (Bosworth and Burtless, 1992; Auerbach and Hassett, 1992). These are desirable outcomes if the state desires continued economic growth since capital-intensive industries are growing and pay high wages. In contrast, labor-intensive industries throughout the United States are struggling to survive against foreign competition. However, empirical evidence also suggests that capital-intensive investment is most compatible with jobs for skilled workers, and that capital generally substitutes for low-skilled workers. Kesselman, Williamson, and Brandt (1977) studied whether capital was complementary with white or blue-collar workers, and whether these two categories of workers were substitutes for one another. They found that capital is complementary with white-collar workers and a substitute for blue-collar employees in manufacturing. Thus a subsidy to capital will stimulate the use of capital, raise the demand for its complement (white-collar workers), and reduce the demand for substitutes, i.e., blue-collar workers. More important for the issue at hand, they found that tax credits for employment dramatically increase the number of jobs, compared to investment tax credits (for equal revenue foregone), and that marginal employment tax credits (tax credits for new employees hired) have the largest effect on employment. These results are supported by more recent research by Bergstrom and Panas (1992), Papke (1993), and Gravelle (1992). Hence, it appears that there is now a growing consensus on this issue among economists.

Labor cost subsidies of the type emphasized in Georgia (namely, a fixed amount of subsidy [i.e., credit] for each worker hired) reduces the cost of lower-paid workers compared to higher-paid workers and encourages the substitution of lower skilled for more highly skilled, better-paid workers.

Due to their differing effects, capital and labor cost subsidies should be targeted as follows:
(1) where there is a ready supply of skilled workers or where appropriate training could bring forth

such a supply within a reasonable time period, capital cost subsidies should be used, and (2) where jobs are needed for lower-skilled workers, labor cost subsidies are the preferred alternative. These targeting rules are only partially followed within Georgia's overall economic development programs. For example, the incentive contained in the state's new enterprise zone legislation (the Georgia Enterprise Zone Employment Act, House Bill 633) is the abatement of ad valorem property taxes, which is a type of capital cost subsidy. But the primary need within the distressed areas that are eligible for zone designation is jobs for lower-skilled workers. This argues for the use of labor cost subsidies. When capital subsidies are used instead, there may actually occur a *reduction* in both wages and employment within the zone (Gravelle, 1992; Papke, 1993). At a minimum, economic development policies should do no harm, even where they are not particularly effective. This may not be true for enterprise zones within the State of Georgia.

Another example of imprecise targeting of capital and labor cost subsidies is that firms locating or expanding employment in Georgia can take either a job tax credit or an investment tax credit, but not both. No attempt is made to target these subsidies according to the guidelines offered above. The amounts of the credits are larger and eligibility criteria are weaker in the state's least developed counties, which is desirable. But the relative attractiveness and availability of investment versus job tax credits might also be made to vary across counties, with the latter emphasized in Tier One (least developed) counties.

The long-run goal should be to increase the skills of workers living in Tier One counties so that these areas are attractive to higher wage, capital-intensive industries. But improving the quality of a region's workforce takes considerable time because this process must begin with better basic education within elementary and secondary schools. Moreover, after improving workforce quality, it may take an extended period of time to alter the negative impressions that many potential investors have of the skill levels of Georgia's rural workforce. In the interim, Tier One counties badly need

lower-skilled replacement jobs for those now being lost in Georgia's traditional industries: pulp and paper; textiles, carpet, and apparel; and food processing. The emphasis, therefore, should be on job tax credits and not investment tax credits. Currently firms in Tier One counties can take a 5 percent investment tax credit (total investment must be at least one million dollars) *or* a \$2500 job tax credit for each new job created (at least five new full-time workers must be hired). To encourage job expansion within Tier One counties three options can be suggested: (1) eliminate the investment tax credit, (2) increase the amount of the job tax credit, or (3) modify the investment tax credit to include a job creation requirement (e.g., to be eligible for the current 5 percent investment tax credit, in addition to investing a minimum of one million dollars in plant and equipment, a minimum of, say, 30 new jobs might be required).

II. More Precise Targeting

There are a number of facts relevant to state and local economic development that should be kept in the forefront in deciding which businesses are eligible for tax incentives and other financial subsidies:

- (1) On average, about three-quarters of the jobs created by economic growth go to in-migrants from other states and countries--only *one-quarter* go to original state residents (Bartik, 1991).
- (2) Economic development incentives are costly per job created. Incentives are not a free lunch. They are costly because there is a revenue loss associated with the fact that many firms would have come to the state or expanded within the state regardless of incentives provided. Bartik (1994) has estimated that the average net government cost per job created by incentives is equivalent to around \$4,000 annually for the life of the plant. Similar high costs have been estimated by Murray (1992).
- (3) Economic research shows that there are marked differences in the *quality* of jobs across different industries as well as within given industries for workers with similar education, age, and other characteristics. Job quality varies not only because wages are different but also because of differences in working conditions, fringe benefits, opportunities for advancement, and worker training (Katz and Summers, 1989; Groshen, 1991; Osterman, 1988; Appelbaum and Batt, 1994).

- (4) Different industries have widely different employment effects. Industries that export more of their products or services out-of-state or that rely more heavily on in-state suppliers have stronger forward and backward linkages, respectively; stronger linkages result in higher employment and income multipliers.

The above facts indicate that the costs of creating jobs via tax incentives and other financial subsidies are high and that the benefits from new jobs vary greatly depending on who gets the jobs (original residents versus immigrant), the quality of the jobs, and the size of multiplier effects. To maximize the benefits of incentives relative to their costs, it is imperative that the state more finely target its incentives. Some targeting is already done: job and investment tax credits are worth more in less developed counties and both of these credits, as well as sales tax exemptions, are generally restricted to industries that serve markets that extend beyond state boundaries. However, the state should also consider targeting high quality jobs (as defined above), jobs that go to original state residents, and jobs in industries that have high multiplier effects. As an illustration, it would be relatively easy to amend the JTC to provide higher credits for new jobs that (1) pay above a certain wage or that provide health care insurance, (2) go to original state residents, or (3) are in industries that have strong forward or backward linkages within the state. Larger credits might also be given to firms within the industries that are the foci of the Georgia Research Alliance—advanced telecommunications, biotechnology, and environmental technologies.

In recent years, many other states have fine-tuned the targeting of their economic development incentives in recognition of their high costs. For example, Kentucky and Oklahoma both provide incentives to service facilities but require that they export more than 75 percent of their services outside the state. Moreover, in the case of Kentucky, firms must increase their employment of *Kentucky residents* by a minimum of 25 new, full-time jobs. Oklahoma restricts its incentives to firms that offer workers basic health benefits. Alabama's income tax credits and job development credits are both restricted to relatively high-wage jobs. Florida's primary incentive program is the

Qualified Target Industry Tax Refund Program. To qualify for a refund, a business must pay an average wage that is at least 15 percent greater than the state's average annual wage and create employment beyond a minimum amount. The job creation must also make a significant contribution to the local economy as judged by the Department of Commerce. Other states that are more closely targeting their incentives to maximize benefit/cost ratios include North Carolina, Arizona, and Utah. Georgia should follow their lead.

III. Property Tax Abatements at the Local Level

There is no statewide property tax abatement program in Georgia. In the case of industrial development bond financing, local communities may be able to offer companies ad valorem tax exemption, depending upon the type of Development Authority established and its legal powers. Such an exemption is possible if the Development Authority is a Constitutional Development Authority governed by a local constitutional amendment containing the power to grant the exemption and if the Development Authority is the legal owner of the property under a "sale and leaseback" arrangement. If the Development Authority is a Constitutional Development Authority without the power to grant the exemption, a Statutory Development Authority, or a Downtown Development Authority, and if legal title to the property is held by the Development Authority, the property financed by industrial development bonds is exempt from ad valorem taxation, but the leasehold estate owned by the company is subject to property taxes. Under this arrangement, property taxes are lower than if the company held title to the property, since the leasehold estate is assessed at a lower rate than if the legal title is held by the company.

Local governments in Georgia frequently employ property tax reductions and abatements to attract employers to their communities. But there are major concerns with these incentives. First, local communities within the state are pitted against one another, which enhances the bargaining power of firms' relative to that of the communities. As a result, communities may end up giving away

more in order to “land the location” than would be necessary in the absence of intrastate competition. Second, communities are highly unequal in their ability to offer property tax incentives; i.e., the playing field is anything but level. What exacerbates this concern is that the communities with the greatest need for jobs are those least able to afford losses in property tax revenue. Third, there is a common perception, which may or may not be accurate, that some communities are playing unfairly by offering abatements without the legal authority to do so. Finally, there is the concern that some communities are trading better schools and other public services for jobs, which may jeopardize the long-run competitive position of the community and state, as well as reduce the future opportunities of the community’s youth.

Unfortunately, no information is collected from local communities on their use of property tax abatements by the state or any other entity. All that is available is anecdotal information (which in most cases tends to underscore the above concerns). Such information is not sufficient for the development of sound policy. Hence, Georgia should follow the lead of the State of Tennessee and pass a disclosure law. Legislation passed in Tennessee in 1992 requires that:

All economic development agreements should be reduced to writing and submitted to the chief executive officer of each jurisdiction in which the property is located and to the comptroller of the treasury, for review, but not approval. The agreement may be submitted in advance of its execution but must be submitted within ten days after its execution. The name of private business entities which are parties to the agreement may be obscured on copies of agreements submitted in advance of their execution. [Acts 1992, ch. 1000, §3.]

A disclosure law would reduce possible illegalities in the abatement process and would help flag those communities whose abatement practices may be detrimental to the overall good of the community. Most importantly, disclosure would provide the data necessary for possible statewide reform in the future.

IV. The Jobs Tax Credit: A Critique

It was argued above that labor cost subsidies are the preferred incentive in areas where job creation is the most important economic development objective. Georgia's principal labor costs subsidy is the jobs tax credit (JTC), which was established by the Georgia State Legislature in 1989. Since then, additional legislation has been passed that increased the amount of the tax credits and extended their eligibility. Nevertheless, recent evidence suggests that the JTC has little, if any, effect on job expansion or job location within the state. Here are the facts (Faulk, 1998):

- (1) Over the years 1993-1995 only 0.01 percent of all taxable firms in the state took the JTC.
- (2) The participation rate among eligible firms (i.e., those that had created the minimum number of jobs and sustained them over the required two year time period) during 1993-1995 was 19 percent.
- (3) On average, among the firms that took the JTC, the savings in labor costs was less than 1 percent.

The first two facts indicate that the JTC program is highly underutilized. There are two possible reasons for this: firms are unaware of the program and/or the net benefits (benefits less costs) from program participation are negligible. Extant evidence lends support to both of these reasons. The 1995 Georgia Business Climate Survey indicated that "business owners are generally not aware of the tax incentives available through the Business Expansion Support Act of 1994" (Governor's Development Council, 1996). The centerpiece of this Act was the expansion of the JTC program to all counties throughout the state. The possibility that net benefits may be too small to induce widespread participation is indicated by the small labor cost savings experienced by participating firms as the result of taking the credits. In addition, growing firms tend to be small, start-up firms without income tax liability. If credits are too small to cause eligible firms to participate, they are also likely to be too small to affect business location and expansion decisions.

There is additional evidence which suggests that the JTCs may be irrelevant to firms' decision making. A recent survey of corporate executives indicated that they used a real interest rate of 12

percent to discount future cash flows (Summers and Poterba, 1994). This is an important finding because, as Bartik (1995) has noted, it indicates that the typical U.S. business firm has a short time horizon. Tax savings provided in future years may therefore have little effect on current corporate decisions. Among the firms who took the JTC over the years 1993-1995, 50 percent carried the credits forward to future years (Faulk, 1998). (The program allows unused JTCs to be carried forward for up to ten years.) The most obvious explanation for postponing the use of tax credits is that the firm's profits are too low to generate enough tax liability against which to take the credits. Among the firms that are eligible for the JTC but do not bother to take it, approximately 65 percent have little or no tax liability. Also, among all taxable corporations in Georgia more than 75 percent have no tax liability in any given year. The combination of small labor cost savings and the postponement and therefore discounting of these savings causes Georgia's JTC program to be of little value to most firms.

If a labor cost subsidy is to succeed in creating jobs, at a minimum it must be valuable to businesses. A labor cost subsidy more valuable than the current JTC could be constructed in one of two ways. The easiest approach would be to simply allow the JTC to be taken against other tax liabilities of the business and not just its corporate income tax liability. For example, Florida offers a \$5000 JTC that can be taken against the corporate income tax, sales and use taxes, intangible personal property taxes, emergency excise taxes, and ad valorem taxes. By increasing the number of taxes eligible for credits, those firms with low corporate income tax liability would still be able to benefit from the JTCs without being forced to carry the credits forward thereby discounting their value.

The other approach to a more valuable labor cost subsidy would be to provide some type of subsidy per job created rather than a tax expenditure. Again, the easiest way to do this would be to amend the existing JTC to allow for refundable credits, as is done in a number of other states.

Another attractive job creation subsidy is the forgivable loan, which over time is converted to a grant if job creation goals are met. The advantages of forgivable loans are as follows:

- As is true with increasing the number of tax liabilities against which the JTC can be taken, forgivable loans account for the fact that businesses have short time horizons.
- Forgivable loans have a built-in “clawback” provision that allows for a recovery of the subsidy if the firm fails to deliver the requisite number of jobs.
- Forgivable loans force current leaders to deal with the costs of subsidies during their time in office. Tax expenditures carried over up to 10 years into the future encourages irresponsible public decision making.
- Despite their advantages, forgivable loans have not been widely implemented by other states. In contrast, JTCs are offered by most states. Because of their greater value to businesses, forgivable loans could enhance the competitive position of Georgia relative to other states.

V. Evaluation of Economic Development Programs

Like most other states, Georgia does little to evaluate the cost-effectiveness of its tax incentives and other economic development programs. One approach to evaluation that has grown in popularity is “benchmarking”; benchmarking refer to measurable indicators of progress made toward accomplishing long-run goals, or to both goals and outcomes. Regardless of precise definition, the major difference between benchmarks and traditional assessment tools used by states is that benchmarking focuses on results and outcomes rather than activities such as dollars spent or services provided. Oregon, in 1991, was the first state to use the benchmarking method of performance evaluation; since then, the device has spread to many other state and local governments. In Georgia, benchmarking was proposed by the Governor’s Development Council (Governor’s Development Council, 1994), and while it has been introduced as part of the state budget process, a more detailed and extensive benchmarking effort is needed if it is to serve as a basis for evaluation.

Benchmarking has a number of attractive features. First, it forces the state to envision what it wishes to become, an essential element in any long-run plan. Second, it permits progress toward

long-range strategic goals to be monitored. There are also important limitations of benchmarking. First, the relationship between milestones and goals is often unclear. Second, benchmarking does not directly link the amount of progress to specific state programs or policies; it is therefore limited in its ability to serve as an evaluation instrument. Third, much of the variation in benchmarks over time can be attributed to changes in the national economy. For example, one of the most commonly employed benchmarks is per capita income. In his 1993 study *State Government and Economic Performance*, Paul Brace found that holding all other factors constant, 90 percent of the variation over time in a state's per capita income can be explained by changes in the national business cycle. As Weinstein (1995) has noted "The implication of Brace's work, of course, is that at most 10 percent of the variation in state economic performance will be influenced by sub-national policy interventions." Thus, benchmarking efforts can be substantially improved if chosen benchmarks are computed relative to the national average of such benchmarks. In this way, a state's progress can be measured relative to that of other states; and, more importantly, the results of its economic development programs can be better assessed. As an example, consider how successful Georgia has been in moving its citizens from welfare to work. But the real question is how much of this success can be attributed to enlightened state policy and how much is due to the continuing strength of the national economy? If the state was to adopt a relative benchmarking evaluation program, this question as well as others related to the effectiveness of state policies, could be better addressed.

In addition to benchmarking, there are two other strategies for evaluating state and local economic development programs that are worthwhile, namely, firm surveys and hypothetical firm techniques.

Many of Georgia's economic development programs involve providing services to firms--information, training, advice, etc. These programs can be evaluated relatively inexpensively by written surveys of the businesses that are clients of these programs, asking them to rate the quality

and effectiveness of the assistance they received. Surveys can also be done for programs that provide tax subsidies, loans, or other financial subsidies to firms. Many economists, however, are doubtful that the latter surveys will yield reliable information because there is incentive for “strategic behavior” on the part of respondents who believe their answers may influence the study’s results -- and thereby, public policy toward business. For this reason, these economists believe responses will be biased in favor of financial subsidies. While this may be true, Ihlanfeldt (1995) cites evidence that suggests strategic behavior may not be so common as to completely invalidate the usefulness of the survey approach. Because firms do not have strong incentives to engage in strategic behavior in responding to questions that ask about the services provided to them by the state, surveys should definitely be employed to evaluate these programs. They might also be used in the case of financial subsidies, but only with the appropriate caveats regarding the possibility of biased responses.

To maximize the usefulness of the survey approach to program evaluation, the survey instrument should be standardized across programs and over time. In that way, the relative effectiveness of different programs and changes in their effectiveness can be more accurately judged. In addition, surveys should be conducted by independent third parties (i.e., not by the agency that administers the program), and there should be complete client confidentiality. The details on how to conduct surveys of the business clients of state economic development programs, including suggested survey instruments, can be found in *Monitoring the Outcomes of Economic Development Programs* by Harry Hatry, et al. (1990).

While Georgia has not routinely used the survey approach to evaluate its economic development programs, the state does have some experience that could be drawn upon to develop a comprehensive economic development client survey program. For example, in 1997 a large-scale survey of the Department of Technical and Adult Education’s (DTAE) clients was jointly conducted by the Carl Vinson Institute of Government at the University of Georgia and the Georgia Fiscal

Research Program at Georgia State University. The state's return on its investment in this project could be maximized by applying the knowledge acquired in conducting the DTAE surveys to similar surveys of the state's other economic development programs.

Because of possible response bias from strategic behavior when conducting surveys to evaluate financial subsidy programs, there is a need for an alternative evaluation technique of these programs. Fortunately, the hypothetical firm technique can meet this need. As discussed above, if incentives are not valuable to a firm they are unlikely to affect where the firm locates or whether it expands. The hypothetical firm technique allows reliable calculations of the relative values of different financial subsidies to firms within a particular industry. Models are built that replicate the operation ratios, balance sheets, and income and tax statements of real, or at least "potentially" real firms. This allows researchers to simulate the impact on a firm's income of a state's, city's, or county's taxes and economic development incentives. If the State of Georgia was to develop hypothetical firm models for the industries it was interested in attracting (e.g., those listed earlier that are part of the Georgia Research Alliance), there could be handsome paybacks in the evaluation of existing incentives and the development of new ones. The results of these models could also be used in marketing efforts by demonstrating to prospective employers the "bottom-line" advantage of a Georgia location. For more detail on the hypothetical firm technique, see Fisher and Peters (1998).

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