Year-to-year fluctuations in revenue related to economic recessions and economic growth have a potentially serious effect on the state’s budget. Because of a desire to avoid or reduce the need to cut expenditures or raise tax rates, most states have established special reserves that are referred to as budget stabilization or “rainy day” funds. This report explores Georgia’s rainy day fund, formally known as the Revenue Shortfall Reserve. The report provides a summary of the operation of the Revenue Shortfall Reserve; an analysis of the size objective and operation of the fund; a comparison with other states, and; suggests possible changes in the structure of the Revenue Shortfall Reserve.

I. Georgia’s Reserves

Georgia’s rainy day fund was established in 1976, making it one of the first states to adopt such a policy. The goal is to maintain a Revenue Shortfall Reserve equal to 3 percent of the previous year’s budget, as measured by actual net revenue collections. The Revenue Shortfall Reserve is funded only if a sufficient surplus exists.

The Revenue Shortfall Reserve is one of several reserve funds that the state maintains. Most of these reserves are restricted and hence not available to finance a budget shortfall. However, there are two reserves in addition to the Revenue Shortfall Reserve that can be used for budget shortfall. The Midyear Adjustment Reserve, established in 1981, is equal to 1 percent of net revenue collections, and is also funded from the state surplus. The other “reserve” is the unrestricted regular Surplus, which is the amount of funds remaining when the above requirements are met.

At the end of FY 1997 (i.e., the beginning of FY 1998), the Revenue Shortfall Reserve was $333.9 million, the Midterm Adjustment Reserve was $111.3 million, and the regular Surplus was $588.9 million. There is little conceptual difference between these three funds. Thus, the sum of the three (which will be referred to as “Total Reserve”) is the actual amount available to finance a budget shortfall. The total available funds were thus $1,034.2 million, which is 9.3 percent of FY 1997 net revenues.

Other than the names, there is no essential difference between the Revenue Shortfall Reserve, the Midterm Adjustment Reserve, and the Surplus in terms of how they can be used. However, by designating part of Total Reserves as the Revenue Shortfall Reserve, there may be less political pressure to use that part of Total Reserves to fund additional services or to cut taxes. That is, if the Surplus gets very large, there are likely to be calls to reduce the Surplus by either spending it or by cutting taxes, both of which decrease the amount held for “rainy days.”
II. Revenue Shortfall Reserve: Size, Objective, and the Impact of a Recession

The purpose of a rainy day fund is to provide a cushion against large decreases in revenue or revenue growth due to economic recessions. The answer to the fundamental question of how large of a cushion should the state maintain depends upon the state's fiscal objective in holding reserves. One possible objective would be that the state wants to maintain its historic spending pattern in spite of the recession. An alternative objective would be that the state desires to avoid having to cut an adopted budget or raise taxes during the fiscal year. To estimate the Total Reserves necessary to achieve either objective it is instructive to consider the effect of prior recessions.

Assume the state had wanted to maintain the same historic growth in expenditures during the recessionary period 1990 through 1992, i.e., ameliorate the total effect of the recession. If the state had wanted to maintain the same dollar increase in the state budget, the state would have needed a fund balance of $1,936 million, which is 27.8 percent of the state's FY 1989 net revenues adjusted for a 4 percent sales tax rate. If the state had wanted to maintain the historic average annual growth rate, the state would have needed a fund balance of $3,410 million, which is 48.9 percent of the state's FY 1989 net revenues adjusted for a 4 percent sales tax rate.

The above calculations assume that the effect on Georgia of the next recession will have the same magnitude as the 1990-91 recession. Accounting for the randomness of the effect of recessions, we find, for example, that there is a 50 percent probability that a reserve equal to 25 percent of net revenues would be depleted by the recession.

As an alternative objective, suppose that the state only wants to hold sufficient reserves to be able to finance the adopted budget, i.e., avoid any cut in adopted expenditure because of a recession. It is assumed that in subsequent years the state will adopt budgets that reflect the smaller amount of revenues that will be generated due to the recession.

If we assume that actual revenue growth is zero, then financing the adopted budget would have required a reserve of 18.5 percent of FY 1997 net revenues. This level of required Total Reserves is probably an upper bound estimate of what might be necessary to meet the budget for one year since the estimate assumes a large budget increase and no revenue growth.

Rather than considering the largest percentage increase in the budget, consider the actual effect of the recession on state budgeting, i.e., consider the amount that the state had to reduce its budget during the 1990-92 recessionary period. If Total Reserves had to finance the FY 1990 shortfall, then required Total Reserves, expressed as a percentage of FY 1989 net revenues (adjusted to reflect the 4 percent sales tax rate), is 7.0 percent. To finance both the FY 1990 and FY 1991 shortfall would have required Total Reserves of 12.9 percent.

Thus, depending on the state's fiscal objective, Total Reserves of between 7.0 percent and 48.9 percent would be required to offset the effects of a recession. Adopting a Revenue Shortfall Reserve at the upper end of that range is overly cautious and unrealistic. However, given the experiences with shortfalls in the FY 1990 and FY 1991 budgets, a Revenue Shortfall Reserve at the low end of the range is unlikely to satisfy the state's fiscal objective. Thus, the state should consider increasing the Revenue Shortfall Reserve from the current 3 percent to between 10 and 15 percent of net revenues.

III. Structure and Operation of Rainy Day Funds

The growth in Georgia's Revenue Shortfall Reserve depends on there being a Surplus at the end of the year. Some (8) states take a more aggressive approach to the development of their rainy day fund. Rather than using the surplus, these states require that a fraction of the state's revenue (or budgeted expenditures) be allocated to the rainy day fund. For example, Indiana requires that funds be transferred to its rainy day fund if the growth of total state personal income is greater than 2 percent, with the percentage of the total general fund revenue transferred equaling the growth rate of personal income less 2 percent.

With a balance of 3 percent of net revenues, Georgia is below the mean of 3.8 percent and the median of 3.3 percent for other states.

Thirty-three states have caps on the size of rainy day funds, usually expressed as a percentage of the budget. Georgia's 3 percent cap is low relative to other states. Some states have adopted very high caps; for example, Michigan has a 25 percent cap, Florida has a 20 percent cap, and Iowa, Oklahoma, Texas, and Virginia have 10 percent caps.
Twenty-three of the 44 states with a rainy day fund allow use of the fund to cover a deficit or if revenues fall below projections. Georgia's Revenue Shortfall Reserve follows this pattern; the funds can be used whenever there is a budget deficit, regardless of the cause.

Some states have structured their rainy day fund to reduce the likelihood that the fund will be used in non-recessionary periods. Seventeen states allow the use of their rainy day fund only through direct appropriation, and in some cases only by a super-majority vote. Four states (Arizona, Maryland, Michigan, and Indiana) use a formula to determine whether their rainy day fund can be used.

IV. Recommendations

Based on this analysis the following are changes to the Revenue Shortfall Reserve that the Georgia General Assembly should consider:

- **Increase the size of the Revenue Shortfall Reserve, perhaps to 10 to 15 percent of net revenues.**

  The current 3 percent is very unlikely to be sufficient to offset a significant portion of the slow down in revenue during the next recession. During the 1990-92 period the state had to reduce budgeted spending, in addition to using the funds in Revenue Shortfall Reserve and in the Surplus, in order to avoid a deficit. To avoid such budgetary difficulties, it is necessary to increase the Reserve. One way to do this would be to transfer much of the current Surplus to the Revenue Shortfall Reserve. The 1990-91 recession seemed to have a greater effect on Georgia than some previous recessions. Thus, setting the Reserve to completely offset the effects of a similar recession, which would require a reserve of 30 to 50 percent, would be overly cautious. The lower reserve (10 to 15 percent) reflects the view that budget growth should be reduced during a recession.

- **Adopt a formula, such as that used in Indiana, for determining the amount of the Revenue Shortfall Reserve that can be drawn down.**

  As currently structured, the Revenue Shortfall Reserve can be used during non-recessionary times by adopting an overly optimistic revenue forecast. One way to prevent such use of the reserve is to adopt a formula under which the reserve can be used only if the state's economy either declines or its growth significantly slows. This change is even more important if the size of the Revenue Shortfall Reserve is increased.

- **Change the funding mechanism to be based on a percentage of net revenue.**

  Rather than using a percentage of the Surplus, a more aggressive approach to the growth of the Reserve is to require that the Reserve be funded from net revenues rather than from the Surplus. Conditions would have to be imposed so that no deposit would be necessary if the economy was in a recession or was growing very slowly.

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