State Budget Balancing Strategies: Riding into the Future on Lessons Learned from the Past

Marilyn Marks Rubin
Professor, John Jay College
City University of New York
Department of Public Management
445 W. 59th Street
New York City, New York 10019
212,237.8091
mrubin@jjay.cuny.edu

Katherine G. Willoughby
Professor, Georgia State University
Andrew Young School of Policy Studies
Department of Public Management and Policy
P.O. Box 3992
Atlanta, Georgia 30302-3992
404.413.0117
kwiloughby@gsu.edu

Introduction

State governments in the United States today are experiencing their worst fiscal crisis since the end of World War II and are taking a wide range of actions to meet their balanced budget requirements.

“The weak economy has precipitated another state budget crisis. State tax revenues have dropped sharply, while their costs continue to rise. To maintain budget balance, states are cutting employment and services while raising fees and taxes. These actions delay economic recovery and offset the economic stimulus coming from monetary policy and the federal budget.”

“…declining state and local budgetary surpluses may add to the federal deficit's effects in impeding stronger long-term growth in the U.S. economy. To the extent that this is the case, the "budget problem" as it affects the future of the nation's economy is not simply a federal deficit problem, but rather a general governmental problem in the federal system. Viewing the matter in this broader, total intergovernmental context could help federal officials better gauge the size of the overall problem and devise appropriate budget and economic growth strategies.”

Apt descriptions of what is happening in 2009? Absolutely. But, the first quotation is taken from a 2002 Brookings report describing the budget crises in the states at that time (Rivlin 2002); the second from a report prepared a decade earlier by the U.S. Government Accountability Office (GAO 1993).¹ In fact, both quotes could have been used to describe the several budget crises faced by the states during the past three decades.

Since 1980, the United States has experienced four national recessions, one in the first three quarters of 1980, a second from the third quarter of 1981 through the fourth quarter of 1982, a third beginning in the third quarter of 1990 through the first quarter of 1991, and a fourth in all or parts of the four quarters of 2001. Since then, regardless of the economic climate, states are being held more accountable to various long-term obligations regarding aging populations (e.g., retiree benefits and other post-employment benefits), infrastructure maintenance and modernization, and the need to integrate new technologies into all aspect of government. It is therefore not surprising that even prior to the current recession state chief executives expressed concern about maintaining budgetary structural balance while managing through fiscal crisis. More than half of the governors specifically mentioned structural
balance and/or problems with balancing their budgets in their 2008 state-of-state addresses (Willoughby 2008). In this paper, we are interested in what can be learned from the past about successfully managing through fiscal crises.

While budgetary crises in the states have typically been associated with downturns in the aggregate U.S. economy (Hovey 1999), their severity and duration have differed across the states and across time (Owyang, Piger and Wall 2005). The objective of the present research is to examine how these cross-state differences affect state budgetary actions. The specific questions we address are: (1) Do states with longer lasting economic contractions adopt more and different budgetary policy responses than states where the duration of the crisis is shorter? (2) Do states with the most severe economic downturns adopt more and different budgetary strategies than do states where the recession is less so?

We begin with a discussion of reference dates related to the business cycle in the U.S. as a whole and in individual states. We then focus on the variation among the states in the duration of their economic downturns associated with the national contraction that ran through the four quarters of 2001 – the latest recession for which there are defined beginning and end reference dates. This is followed by an analysis of the relationship between the duration and severity of the 2001 recessionary period among states and the types of budget balancing strategies they adopted in 2002 and 2003, the two fiscal years directly following the 2001 national recession.

Our findings indicate that, in general, states experiencing longer and more severe economic downturns use more and different budget balancing strategies than states with less protracted and weaker economic contractions. Additional research is needed, however, to more fully understand the dynamic between the duration and severity of business cycles in the states and the strategies used to meet balanced budget requirements imposed on 49 of the 50 states.
Recessions in the U.S. and the States

Historically, the U.S. economy and the economies of other industrialized countries have vacillated between periods of growth and decline, i.e. business cycles which are comprised of a five phase sequence: growth (expansion), peak, recession (contraction), trough and recovery. Since 1929, the National Bureau of Economic Research (NBER), a private, nonprofit research organization, has been considered the primary arbiter for business cycle reference dates in the U.S. While an oft-used rule-of-thumb definition of a recession is two consecutive quarters of falling gross domestic product (GDP), the NBER uses a more complex procedure that looks at a variety of monthly statistics to determine when recessions begin and when they end.\(^2\)

The NBER is not the only source of information regarding business cycle turning points.\(^3\) However, its business cycle reference dates, as well as reference dates developed by others, apply to the nation as a whole and not necessarily to individual states that “… can (i) switch into or out of recession long before or long after the nation as a whole does, (ii) be in expansion during the entire time that the nation is in recession, and (iii) experience a recession that is not associated with any national recession” (Owyank, Piger and Wall 2002, 607).

Primarily because of data limitation, there is a relative paucity of research to identify cyclical movements in the states or even regions of the U.S. One notable exception is found in a study published by Owyang, Piger and Wall (2005) in which they use several sophisticated statistical techniques to pinpoint individual state business cycle reference dates. We use Owyang, Piger and Wall’s reference dates to identify the recessionary periods of individual states. Table 1 summarizes data in their Tables 3 and 4 and shows the number of states experiencing recessionary periods, by quarter, during the four national recessions specified by NBER from 1980 to 2001.
Table 1: State Recessionary Periods and U.S. Economic Downturns, 1979 - 2002

<table>
<thead>
<tr>
<th>NBER Specified</th>
<th># States in Recession</th>
<th># States in Recession</th>
<th># States in Recession</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recessions, in Qarters</td>
<td>2 quarters directly prior</td>
<td>2 quarters directly following</td>
<td>2 quarters directly prior &amp; following</td>
</tr>
<tr>
<td>1st-3rd quarters, 1980</td>
<td>22</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>3rd quarter, 1981-4th quarter, 1982</td>
<td>21</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>3rd-4th quarters, 1990-1st quarter, 1991</td>
<td>12</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>1st-4th quarters, 2001</td>
<td>16</td>
<td>37</td>
<td>15</td>
</tr>
</tbody>
</table>


From Table 1, it is obvious that reference dates for national recessions do not necessarily define the duration of individual state contractions. In the four national recessions noted, 12 or more states were in recession for the two quarters directly prior to the start date of the national contraction and five or more states remained in recession for the two quarters directly following the end date of each national downturn. Table 1 also shows differences in the duration of state recessions specifically associated with the four nationally defined recessions that occurred from 1980 to 2001. More states were in a recessionary period longer than the country as a whole during the 2001 national recession than in the previous three national contractions. Specifically, in the 2001 national recession, 15 states or 30 percent were in recession longer than the nation as a whole compared to 22 percent of states in the 1990-1991 period, 18 percent in the 1980 period and two percent (just one state) in the 1981-1982 period.

The following analysis focuses on state recessions associated with the 2001 national recession in which there were 16 states already in recession in the two quarters prior the first quarter of 2001 and 37 states remaining in recession after the U.S. economy began to recover.

**The Duration of State Recessions and Budget Balancing Strategies**

In contrast with the federal government, states cannot run budget deficits, with all states except Vermont having a constitutional and/or statutory requirement that the state budget must be in balance. The significance of a balanced budget requirement is that states cannot run deficits when tax revenues...
fall – as they typically do – during the downside of the business cycle. Thus, in times of fiscal crisis, state policy makers and politicians must make difficult budget balancing decisions regarding both the expenditure and revenue sides of the budget (Poterba 1994).

In general, if a budget deficit is expected to be short-term “…then modest adjustments can be made such as …drawing on rainy day funds” (Lee, Johnson and Joyce 2008, 204). Rainy day (budget stabilization) funds are those into which the state deposits money to have available for a “rainy day.” Most states have legal requirements regarding annual deposits that must be made into these funds during periods of budget stability and growth. However, five states do not have rainy days funds and for those that do, the funds are often not sufficient to cover budget shortfalls. This is due to several factors including, but not necessarily limited to, constitutional and/or statutory constraints regarding size of reserves, when fund draw-downs are allowed and how and when funds must be repaid (Finegold et. al. 2003).

Short-term strategies are not intended to deal with fundamental budget problems and may generate only one-time savings or revenues. Their chief advantage is that they typically have an immediate effect on a budget problem. If the budget problem is structural, however, other strategies will have to be used by a state on both the revenue and expenditure sides of the budget to address the chronic gap. This research focuses on state budget balancing actions taken during 2002 and 2003, when many states remained in recession even after the national recession ended in November 2001. These actions include: personnel and programmatic changes, revenue enhancements and expenditure cuts, and several other strategies including various accounting maneuvers.

Many states will turn to expenditure cuts only after they have drawn down on their rainy day funds. Cuts of state funding to programs and services, to individuals, to nonprofit organizations and local governments can help narrow budget gaps at the state level, but they also increase the fiscal pain felt by state funding recipients. Major programmatic areas such as elementary-secondary education,
Medicaid, higher education, corrections and welfare taken together account for approximately 75 percent of state general expenditures, so cuts to these programs can help to reduce state budget deficits.

Reducing personnel costs, a major expense for state governments, is another budget balancing strategy. In 2002, the 50 states taken together employed five million full– and part–time workers associated with payrolls of close to $15 billion (U.S. Census 2002). Thus, when states experience fiscal stress, it should not be unexpected that one of their budget balancing strategies is cost reduction associated with payments to state employees. States can and do employ a wide variety of strategies to reduce personnel expenses such as setting hiring caps and salary freezes, furloughs, early retirements and layoffs.

Personnel cuts of this sort are anathema to state unions many of which are quite powerful. They are probably only slightly less egregious to the public than various revenue enhancement strategies, particularly as economic decline persists. Mention of tax increases is typically viewed as political suicide by elected officials; increases to existing fees and charges and adding new ones are only slightly more palatable. Thus, revenue enhancement strategies are usually considered as a last resort to achieve budget balance, both because of the politics involved as well as the length of time between approval of such changes, and the flow of tax, fee and charge receipts into state coffers.

States may also make programmatic changes to realize balanced budgets. Such changes include reorganizations, consolidations, transfers, and privatization. Prime candidates for restructuring are generally large programs such as welfare and/or those that have expanded rapidly such as Medicaid. Both Medicaid and welfare rolls typically rise during recessionary periods. In fact, the number of Medicaid beneficiaries has been growing rapidly through all phases of the business cycle. “Between 1994 and 2004, enrollment in Medicaid managed care tripled from 7.9 million people… to more than 27 million beneficiaries…” (US News and World Report 2007). Restructuring sometimes involves privatization of state operated facilities e.g., correctional facilities. It should be noted, however, that
privatization does not necessarily result in cost savings (Abt 1998). Also, while the public may be more accepting of some programmatic changes, these types of strategic actions – like revenue enhancements – can take time to implement and any cost savings associated with them may occur far into the future, or at best, in the following fiscal year or two.

**The Duration of State Recessions and Budget Balancing Strategies**

Given the broad array of budget balancing strategies available to states, the first question we ask is: Do states with longer lasting economic contractions adopt different budgetary policy responses than states where the duration of the crisis is shorter? Table 2 shows that states experiencing the longest recessionary periods associated with the 2001 national contraction were more likely to implement budget balancing strategies in 2002 than were states in recession for shorter periods of time. The 23 states with the longest lasting contractions were more likely to implement all 13 of the strategies shown in Table 2; the 16 states with the next longest periods of contraction, 11 of the strategies, and the 11 states with the shortest recessionary periods, eight.

Table 2 also shows that states with the longest recessionary periods were more than twice as likely to access rainy day funds in 2002 than were states with the shortest recessionary periods and were somewhat more likely to do so than were states whose recessionary periods were not quite as long-lasting. In addition, states with the longest periods of contraction were more likely than other states to layoff state workers, reorganize programs, privatize services, reduce local aid, or engage any one of several revenue enhancement strategies. It is evident from Table 2 that all states use the more expedient strategies – spending cuts, accounting maneuvers (included in the “other strategies” category) and programmatic changes – rather than the more politically volatile personnel changes and revenue enhancement strategies such as tax and fee changes.
Table 2: 2002 State Budget Balancing Strategies by Length of Recession before, during and after 2001 National Economic Downturn

<table>
<thead>
<tr>
<th>Quarters in Recession (# of states)</th>
<th>Access Rainy Day Fund</th>
<th>Hiring Limits</th>
<th>Furloughs</th>
<th>Early Retirement</th>
<th>Layoffs</th>
<th>Program Reorganized</th>
<th>Privatization</th>
<th>Across-the-Board Percentage Cuts</th>
<th>Selective Cuts</th>
<th>Reduce Local Aid</th>
<th>Tax Increase</th>
<th>Fees</th>
<th>Other Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-8 of 8 Quarters (23)</td>
<td>61%</td>
<td>13%</td>
<td>9%</td>
<td>9%</td>
<td>39%</td>
<td>43%</td>
<td>9%</td>
<td>78%</td>
<td>4%</td>
<td>22%</td>
<td>13%</td>
<td>13%</td>
<td>74%</td>
</tr>
<tr>
<td>5-6 of 8 Quarters (16)</td>
<td>56%</td>
<td>19%</td>
<td>19%</td>
<td>19%</td>
<td>31%</td>
<td>13%</td>
<td>0%</td>
<td>44%</td>
<td>0%</td>
<td>13%</td>
<td>6%</td>
<td>6%</td>
<td>69%</td>
</tr>
<tr>
<td>4 or less of 8 Quarters (11)</td>
<td>27%</td>
<td>0%</td>
<td>9%</td>
<td>0%</td>
<td>9%</td>
<td>9%</td>
<td>0%</td>
<td>18%</td>
<td>9%</td>
<td>9%</td>
<td>0%</td>
<td>9%</td>
<td>36%</td>
</tr>
</tbody>
</table>


Table 3 shows that in 2003, just as in 2002, states with the longest lasting economic downturns used the various budget balancing strategies to a greater extent than did other states. States where the recession lingered the longest were more likely to use their rainy day funds and to make programmatic changes. However, the variation in the pattern of usage of other strategies was not always as clear cut as evidenced in 2002. For example, states in which the recession was of a shorter duration were more likely to make across-the-board and selective cuts. Additional research is needed to explain this seeming anomaly.
Table 3: 2003 State Budget Balancing Strategies by Length of Recession before, during and after 2001 National Economic Downturn

<table>
<thead>
<tr>
<th>Quarters in Recession (# of states)</th>
<th>Access Rainy Day Fund</th>
<th>Personnel Changes</th>
<th>Programmatic Changes</th>
<th>Expenditure Strategies</th>
<th>Revenue Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Hiring Limits</td>
<td>Furloughs</td>
<td>Early Retirement</td>
<td>Layoffs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7-8 of 8 Quarters (23)</td>
<td>52%</td>
<td>9%</td>
<td>13%</td>
<td>26%</td>
<td>43%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-6 of 8 Quarters (16)</td>
<td>50%</td>
<td>6%</td>
<td>25%</td>
<td>38%</td>
<td>19%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 or less of 8 Quarters (11)</td>
<td>45%</td>
<td>18%</td>
<td>18%</td>
<td>9%</td>
<td>27%</td>
</tr>
</tbody>
</table>


In general, by 2003 states were more likely to choose the less palatable balancing options of personnel changes and revenue enhancements. In particular, furloughs and early retirements were used by higher proportions of states in all three categories of recession duration. All states implemented layoffs of state workers in 2003; states enduring the longest and shortest economic downturns implemented layoffs in higher proportions than in 2002. Much greater proportions of states in all three categories of recession duration implemented fees to increase revenues in 2003 as well. In 2002, this revenue strategy was used by 13 percent of states enduring the longest recessions, six percent of states in the next category, and nine percent of states experiencing the shortest or no recessionary period around 2001. By 2003, these percentages increased to 26, 44 and 27 percent, respectively.

The Severity of State Recessions and Budget Balancing Strategies

Not only does the duration of business cycles associated with national contractions differ across the states, but so do their severity, i.e. their economic impact. Our second research question is: Do states experiencing more severe economic downturns adopt different budgetary strategies than do states where
the recession is less severe? At least three cross-state data series are available to answer this question: personal income, gross state product (GSP), and employment. However, personal income “…does not fluctuate very much with the business cycle” (Owying et. al 2005, 605). Also, there are several issues regarding the GSP including, but not limited to, difficulties in measuring value added within a state and the within state income accruing to factors of production (e.g., labor and capital). While there are also problems involved with using employment statistics, these data are the most generally used to compare economic conditions across states. In our research, we use employment data to assess the severity of state contractions associated with the 2001 national recession. Of the 50 states, 35 (70 percent) suffered job losses in the wake of the national recession, ranging from 0.22 percent to 6.05 percent over the 2000 to 2003 period. Table 4 aligns 2003 state budgeting strategies against 2000-2003 state job loss (U.S. Department of Labor 2009).

Table 4: Employment Change 2000-2003 and 2003 State Budget Balancing Strategies

<table>
<thead>
<tr>
<th>Employment Change (# of states)</th>
<th>Access Rainy Day Fund</th>
<th>Hiring Limits</th>
<th>Furloughs</th>
<th>Early Retirement</th>
<th>Layoffs</th>
<th>Programs Reorganized</th>
<th>Privatization</th>
<th>Across-the-Board Percentage Cuts</th>
<th>Selective Cuts</th>
<th>Reduce Local Aid</th>
<th>Tax Increase</th>
<th>Fees</th>
<th>Other Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; -3.00%</td>
<td>60%</td>
<td>10%</td>
<td>30%</td>
<td>70%</td>
<td>60%</td>
<td>40%</td>
<td>0%</td>
<td>70%</td>
<td>0%</td>
<td>50%</td>
<td>10%</td>
<td>50%</td>
<td>90%</td>
</tr>
<tr>
<td>-3.00% to &gt; -1.75%</td>
<td>54%</td>
<td>0%</td>
<td>23%</td>
<td>23%</td>
<td>15%</td>
<td>15%</td>
<td>0%</td>
<td>62%</td>
<td>0%</td>
<td>23%</td>
<td>8%</td>
<td>31%</td>
<td>62%</td>
</tr>
<tr>
<td>-1.75% to 0%</td>
<td>50%</td>
<td>17%</td>
<td>8%</td>
<td>17%</td>
<td>33%</td>
<td>25%</td>
<td>0%</td>
<td>75%</td>
<td>0%</td>
<td>8%</td>
<td>0%</td>
<td>42%</td>
<td>50%</td>
</tr>
<tr>
<td>&gt; 0%</td>
<td>40%</td>
<td>13%</td>
<td>13%</td>
<td>7%</td>
<td>27%</td>
<td>27%</td>
<td>0%</td>
<td>53%</td>
<td>13%</td>
<td>13%</td>
<td>0%</td>
<td>13%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Table 4 shows that, with few exceptions, the greater the 2000-2003 job loss, the higher the likelihood that states took budget balancing actions in 2003. But even states with no job loss implemented strategies to maintain budget balance. Drawing down on rainy day funds was one of the three most prevalent actions taken by states with the biggest job declines as well as among states indicating no job loss or job growth. Further research is needed to see what other “rainy day” factors were contributing to the decisions by states with job growth to utilize their reserves and to implement other budget balancing strategies.

States that experienced the most extensive job losses were more likely to reduce personnel costs through furloughs, early retirement and layoffs than were states experiencing smaller job declines or showing job gains. Of course, at the same time personnel actions helped reduce state expenditures, these actions contributed to overall job loss in the states. States with the greatest job losses were also more likely to make programmatic changes than were states with less job decline or those experiencing job growth. Again, further research is needed to explain the use of several of these budget balancing strategies by states indicating job growth.

**Discussion and Conclusion**

This research examines duration and severity of recession in the states with specific focus on state contractions associated with the 2001 national economic downturn. We find that the duration of economic downturns differs across the states as well as from nationally defined recessionary periods. Of the four U.S. recessions from 1980 to 2001, our work indicates that states were hardest hit by the 2001 recession. A greater majority of states were in recession in the two quarters directly prior to and directly following the U.S. economic downturn of 2001 than in any of the previous three national recessions noted.

We compare budget balancing strategies used across the states in 2002 and 2003, the two years directly following the 2001 national decline, to assess their relationship to the duration and severity of
the economic contraction in the states. Our review of the budget balancing strategies taken by states in 2002 and 2003 indicates that the most expedient balancing strategies, such as expenditure cuts, drawing down rainy day funds, reorganizations and various accounting and other strategies, were the most frequently adopted by states as well as the most consistently used as the recession lingered. Less frequently used budget balancing strategies were personnel and tax changes.

Examination of the duration of recessionary periods experienced by states and their budget balancing strategies indicates that states experiencing the longest periods of economic decline engage the widest array of budget balancing strategies. These states were also more likely than states experiencing shorter recessionary periods to utilize any specific strategy in 2002 and to use the strategy again in 2003 as the economic downturn persisted. While some states experiencing shorter or no economic downturn surrounding the 2001 recession also implemented hiring limits and early retirements in 2003, they were able to avoid tax increases in both 2002 and 2003, unlike states experiencing longer recessionary periods. In the end, however, battling budget gaps for two years in a row takes its toll – by the second year following the national contraction, all states were more likely to choose the less palatable balancing options of personnel changes and/or revenue enhancements such as tax or fee changes.

Regarding the severity of economic decline exhibited by the states and their use of budget balancing strategies, our results indicate that the greater the job loss experienced by a state, the greater the likelihood that it will initiate a wider range of budget balancing actions. Still, it is intriguing that states with no job loss or even job growth implemented some of the budget balancing strategies noted in our study. For example, drawing upon rainy day funds was one of three predominant actions taken by states with the biggest job losses and those indicating no or positive job change.

On the other hand, distinctions in use of budget balancing strategies by states are found across levels of severity as measured by employment change from 2000 to 2003. States that experienced the
greatest employment decline from 2000 to 2003 were more likely than other states to utilize personnel changes to close budget gaps. Also, states showing the greatest job losses were more likely to initiate programmatic changes than were states with less job loss or those indicating job growth.

Recent research has identified states in structural balance i.e., states with the ability to support ongoing expenditures with ongoing revenues (Willoughby forthcoming). Examination of the budget balancing strategies used by these states indicates a lower likelihood that they will have to take revenue raising and expenditure reducing actions to balance their budgets then will states in a less favorable budget position. Our results in this paper are similar in that we show that states with longer and more severe recessions utilize a wider range of budget balancing strategies and are more likely than other states to use these strategies in the face of an economic downturn. Knowing the effects of duration and severity of recessions on budget balancing strategy choices can push state budget and policy makers to generate better economic and revenue forecasts and then support their consideration of ways to reach budget balance in the least painful way.
Endnotes

1 The Government Accountability Office (GAO) is an agency that works for the U.S. Congress. Established in 1921 as the General Accounting Office, GAO’s work is performed at the request of congressional committees or subcommittees or is mandated by public laws or committee reports. The report cited here analyzed state balanced budget requirements and how these requirements could inform efforts to balance the federal budget.

2 Since 1980, the specific task of dating “turning points” in U.S. business cycles has been the function of NBER’s Business Cycle Dating Committee. This committee places particular emphasis on two monthly measures of U.S. economic activity: (1) personal income minus transfer payments, adjusted for inflation and (2) employment. The Committee’s decision is also informed by changes in industrial production and the inflation-adjusted volume of sales of the manufacturing and wholesale-retail sectors. See http://www.nber.org/info.html for a fuller discussion of turning point determination.

3 See, for example, Boldin (1994).

4 These requirements vary. In 43 states, the governor must submit a balanced budget to the legislature; in 39 states, the legislature must pass a balanced budget; and in 37 states, the budget must be balanced at year-end (the state cannot carry over a deficit into the next fiscal year). Thirty states are held to all three of these requirements. Ronald K. Snell, “State Balanced Budget Requirements: Provisions and Practice,” (1996; updated 2004). NCSL accessed at: http://www.ncsl.org/programs/fiscal/balbuda.htm on December 20, 2007.

5 The employment statistics are based on a sample of companies in each state so that problems related to sampling are inherent in the numbers. A major problem with these data is that the information is released in a timely manner but is subject to significant revisions at a later date.
References


