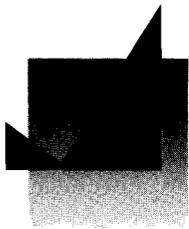


State and local governments' reaction to recession

Richard H. Mattoon
and William A. Testa



Despite the recent economic malaise, state and local governments in the Seventh District largely avoided drastic tax hikes and spending cuts.

Instead, governments have drawn down their reserves, trimmed spending, and deferred payment of bills in the hopes that robust economic recovery will make tax hikes unnecessary. The same strategy was attempted during the region's economic troubles of the early 1980s, and it is a common strategy for state and local governments during a contractionary period. Nevertheless, this strategy failed District governments in the early 1980s when major tax rate hikes ultimately became necessary and were subsequently implemented *after* the U.S. economy hit bottom during the fourth quarter of 1982. This time around, owing to the extended economic weakness, the history of the early 1980s may repeat itself in the form of severe belt tightening and significant tax hikes during fiscal years 1992 and 1993.

In this article we examine the behavior of the state and local sector during the business cycle, paying particular attention to those discretionary actions such as tax hikes and spending cuts that are typically taken by state and local government to maintain fiscal balance in response to business contractions. In particular, we focus on the discretionary fiscal actions of the five Seventh District states (Illinois, Indiana, Iowa, Michigan, and Wisconsin). No two business cycle episodes are identical, especially for the state and local sector which must cope with sharp changes in the direction of federal

grant-in-aid programs. This time around, state and local fiscal pressures are arising from spending pressures as much as from lagging revenues. In response, solutions to budgetary stress are likely to focus on spending cuts as well.

The sector's response during the business cycle

Business cycle contractions are usually accompanied by escalating state and local government fiscal stress and budget crises. Much of the budget stress is taken on willingly by state and local governments as they try to maintain spending commitments without heaping new taxes onto overburdened workers and faltering businesses. In this way, the tax and spending behavior of the state and local sector helps to cushion business cycle contractions; governments build up reserves during business cycle expansions and draw down these reserves or borrow during contractions.

Often, taxes are ultimately raised and spending cut during the later stages of a business cycle contraction or during the recovery period. State and local governments often cannot or will not build up sufficient reserves to see them all the way through business downturns. Furthermore, their ability to take on debt to fund operations is limited so that stop gap fiscal measures become exhausted as contractions wear on.

In the aggregate and on net, state and local behavior has been countercyclical during every

Richard H. Mattoon is a regional economist and William A. Testa is a senior regional economist and research officer at the Federal Reserve Bank of Chicago. The authors thank David R. Allardice for his comments.

business cycle contraction since World War II. In examining state and local expenditures from peak to trough over each contraction, expenditures rise relative to receipts (see Table 1). This comes about as the rate of revenue growth declines more than the rate of expenditure growth.

Revenues have tended to slow or decline immediately following the peak in the cycle. State and local government revenue sources are highly sensitive to economic aggregates such as spending, profits, and income.¹ Receipts from such tax sources as personal and corporate income quickly turn sluggish following the peak of business conditions. In the case of corporate income, the profit decline which typically accompanies a downturn in the business cycle translates into a precipitous decline in corporate tax revenues. In the case of personal income, recession-related declines in employment and diminished payrolls translate into slower personal income growth and sluggish state income tax revenues.

Because state and local governments try to maintain expenditures in the face of declining receipts during contractions, their liquid reserves are frequently exhausted or close to exhaustion toward the trough of a business downturn. For this reason, state and local governments quickly rebuild budget balances in the quarters following the recession, as is reflected by the inverse relation between receipts and expenditures (see Table 1 and Figure 1). Annual expenditure growth generally slows during the expansionary period following a recession. Expenditure cuts and spending controls put in place to relieve state and local fiscal stress during the recession tend to take hold at the tail end of the contraction or during the early recovery, thereby reducing the rate of expenditure growth. Also, demand for social programs such as Medicaid and General Assistance tend to abate with the recovery.

But a far greater contribution toward rebuilding reserves is exerted from the revenue side as receipts grow much faster during the expansion than during the contraction. One

obvious reason for this is that the underlying tax bases accelerate along with the economic recovery. This is reflected by the historic growth in the national economy during the first full year of recovery (see Table 2). GNP growth in the first four quarters following the trough of a recession has been very robust, particularly following the 1975 and 1982 recessions. But a second reason is that if tax rate

TABLE 1

State and local responses to business cycles
(Annualized percent change)

| Contractions peak to trough | Expenditures | Receipts | Grants |
|--|---------------------|-----------------|---------------|
| 1948:4 to 1949:4 | 15.2 | 8.7 | 4.5 |
| 1953:3 to 1954:2 | 10.7 | 4.8 | 0.0 |
| 1957:3 to 1958:2 | 11.9 | 8.9 | 44.4 |
| 1960:2 to 1961:1 | 9.9 | 7.8 | 12.1 |
| 1969:4 to 1970:4 | 14.6 | 11.1 | 16.8 |
| 1973:4 to 1975:1 | 14.7 | 9.6 | 16.9 |
| 1980:1 to 1980:3 | 8.3 | 8.2 | 7.4 |
| 1981:3 to 1982:4 | 6.4 | 5.7 | -1.6 |
| 1990:3 to 1991:1* | 7.4 | 4.7 | 21.4 |
| Expansions trough to peak | | | |
| 1949:4 to 1953:3 | 7.9 | 10.3 | 5.8 |
| 1954:2 to 1957:3 | 10.9 | 10.8 | 15.4 |
| 1958:2 to 1960:2 | 6.6 | 10.0 | 8.9 |
| 1961:1 to 1969:4 | 14.9 | 16.1 | 21.3 |
| 1970:4 to 1973:4 | 11.6 | 14.4 | 19.6 |
| 1975:1 to 1980:1 | 11.3 | 13.5 | 14.7 |
| 1980:3 to 1981:3 | 6.9 | 8.9 | -3.0 |
| 1982:4 to 1990:3 | 10.5 | 9.7 | 6.9 |

*Trough not yet determined for this period.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts (NIPA), Table 9.4, "State and local government receipts and expenditures."

TABLE 2

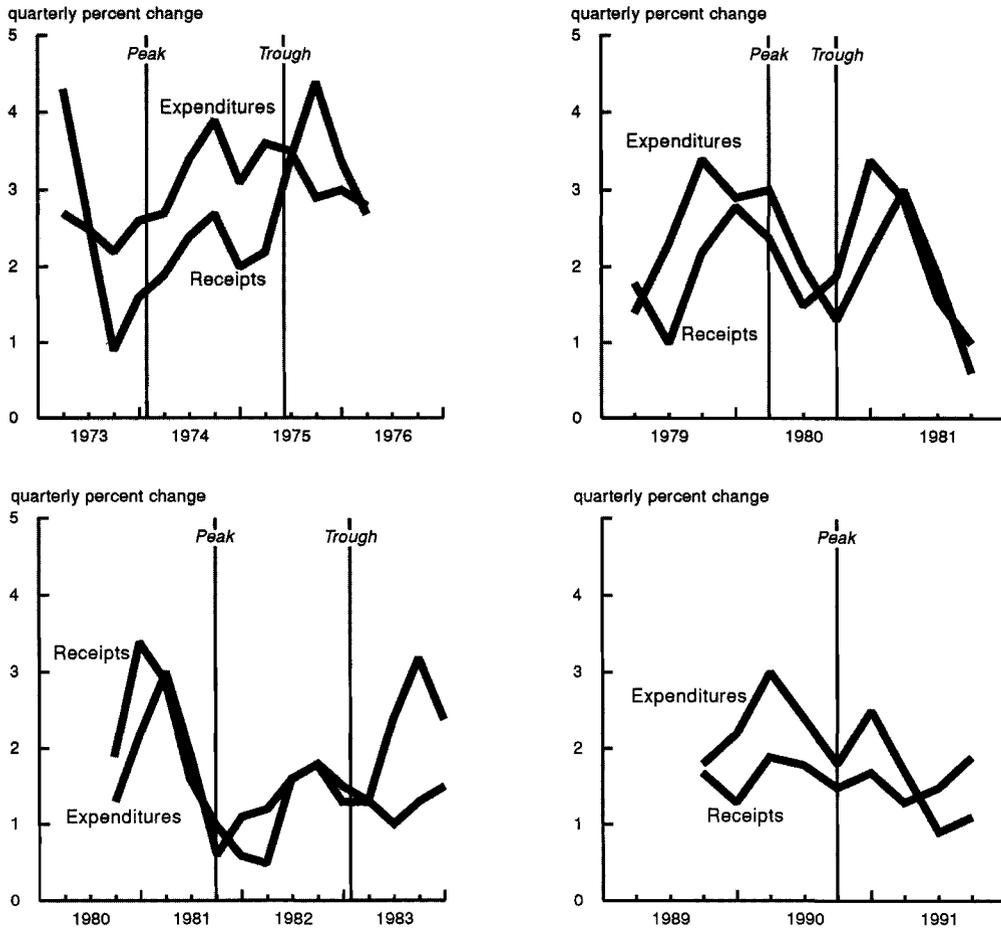
Real GNP following business cycle trough
(Annualized percent change)

| Trough | Q1 | Q2 | Q3 | Q4 |
|---------------|-----------|-----------|-----------|-----------|
| March 1975 | 4.0 | 6.8 | 5.6 | 7.6 |
| July 1980 | 5.2 | 7.6 | -1.2 | 1.6 |
| November 1982 | 3.6 | 9.2 | 6.0 | 7.2 |

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, *National Income and Product Accounts of the U.S., 1957-88.*

FIGURE 1

State and local expenditures and receipts



NOTE: Two-quarter moving average, nominal dollars.
SOURCE: Bureau of Economic Analysis, Department of Commerce, NIPA.

hikes have been adopted at the tail end of a recession, the rate hikes often take hold after the recession. The combination of robust economic growth in the tax base and higher tax rates often lifts state tax receipts dramatically.

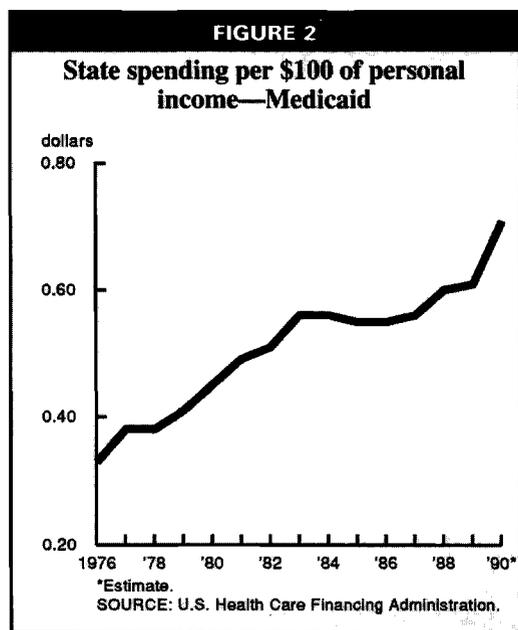
Explaining the sector's behavior

The federal government has a legislated policy to ease the impact of cyclical swings in the economy,² while the state and local sector has no such legislative requirement. Nevertheless, state and local governments are responsible for public health and related functions which are heavily demanded during business cycle contractions.³

As the economy sours and unemployment rises, demands for Medicaid, General Assistance, and other state aid programs increase.

State and local transfer payments grew at a nearly 14 percent annual rate during the 1973-75 recession and again during the 1980 recession. Rising Medicaid expenses, which can be attributed to both recessionary demands and rising program costs, have proven particularly unyielding and will continue to exert pressure as they eat up larger and larger shares of state spending. The relentless climb in Medicaid costs is demonstrated by state Medicaid spending per \$100 of personal income, which more than doubled from 1976 to 1990 (see Figure 2). The jump in Medicaid spending has continued with FY92 state general fund spending estimated to increase by nearly 22 percent.⁴

There are also a host of institutional reasons which help to explain state and local countercyclical behavior. States are often unable to



retrench at the outset of a business cycle contraction because the length and nature of the budget cycle permits little adjustment to unanticipated changes in economic conditions. Thus, when recessions are short in duration or unexpected, state and local governments have difficulty adjusting in a timely fashion. One reason for the readjustment problem is that state budgets are based on economic forecasts which are generated many months before the fiscal year begins. But while the economic conditions underlying the budget may change, components of the budget such as wages and program expenses may be locked in by contracts, agreements, and program plans.

One example of the impact of the state budget cycle on fiscal adjustment occurred with the onset of the recent contraction. Having begun in July of 1990, the contraction's onset coincided with the first month of the new fiscal year for 46 states. Few of the state budgets, which had been developed and submitted in the late winter or early spring of 1990, had anticipated a downturn, so that state spending plans were adopted without any significant revision. Once the downturn began, the budget cycle made it difficult to make more than marginal adjustments to the spending plan which was already underway. Accordingly, unless the economic decline is unusually steep in a given state, major fiscal adjustment is often put off until the next fiscal year, when programs can be evaluated and budget cuts and tax hikes can be

adopted. For example, a reported estimate of \$25 billion⁵ in combined spending reductions and tax increases by state governments did not take effect until FY92, four quarters after the peak in the business cycle.

How state and local governments spend beyond their means

Governments have a variety of tools at their disposal which allow them to spend more than they receive in revenues for a limited period of time. These range from explicit measures, such as drawing down fund reserves, to less visible actions such as various types of fiscal accounting maneuvers. Such measures allow governments to buy time before having to make fundamental adjustments to their spending and revenue systems.

Short of tax rate hikes or spending cuts, the most straightforward method governments have to bridge deficits is to draw down available fund balances. This can take two forms. First, state and some local governments can use accumulated general fund reserves to help close budget gaps. Some states are required to run a surplus in their general fund on an annual basis. Wisconsin, for example, is required to end each fiscal year with at least a 1 percent general fund balance. This surplus can provide a cushion if an unexpected downturn arises. Other states try to maintain informal cash balance targets. Illinois, for example, tries to maintain a general fund cash balance of \$200 million as a reserve to pay for budget gaps. Nevertheless, few states seem able or willing to maintain the suggested reserve level of 5 percent of general fund expenditures recommended by the bond rating agencies and investment banks. During the generally strong fiscal years of the late 1980s, year end general fund balances as a percentage of state general funds averaged 1.7 percent in 1987, 2.0 percent in 1988, and 1.0 percent in 1989.⁶

In addition to attempts to build a surplus directly from the general fund during periods of robust economic growth, 37 states have moved since the late 1970s to adopt so-called "rainy day" funds. These funds are often patterned after Michigan's "Counter-cyclical Budget and Economic Stabilization Fund." As originally designed, the fund was to permit deposits and withdrawals based on growth in Michigan's adjusted personal income. Money would be paid into the fund when the annual rate of per-

sonal income growth exceeded 2 percent. For funds to be withdrawn from the account, an economic contraction would have to be severe enough to cause personal income growth to fall below zero or the unadjusted unemployment rate to exceed 8 percent.⁷

Rainy day funds have proven to be a disappointment to some observers. Budget stabilization funds are seldom sufficient to provide long term fiscal relief.⁸ While 37 states technically maintained rainy day funds in FY89, nine of the funds contained no reserves. Furthermore, only 5 of the states had built up reserves as large as 5 percent of state expenditures.⁹ By the end of FY91, virtually all of the funds were exhausted.¹⁰

Sometimes states prefer not to run down their fund balances at the outset and turn to so-called accounting maneuvers to relieve immediate fiscal pressure. One such maneuver is a fund transfer, which usually entails transferring the liability for a particular expense from the general fund to a dedicated fund such as transportation or infrastructure. When transfers to dedicated funds are unavailable (often due to legal restrictions or the insolvency of the dedicated fund), states often reclassify certain operating expenses as capital expenditures, thereby using bond money to pay for the expense rather than tax or other revenue.

Another stop gap measure is to change the actuarial assumptions underlying state pension fund contributions. This permits the state to reduce its level of pension contribution, thereby freeing revenues for other purposes. Two other popular techniques involve deferring expenditures and accelerating tax payments. By deferring spending liabilities, states act to roll over expenses incurred in one fiscal year into the next fiscal year. This allows the state to end a fiscal year with a balanced budget even if it has outstanding bills. In the case of accelerating tax payments, the schedule for taxpayer payment or user fees is moved up. Annual payments become quarterly, quarterly become monthly, and so on. This technique improves cash flow and can add a one time extra payment during the fiscal year in which the change is made.

With some limitations, states can also relieve fiscal pressure by issuing short term debt. This can improve a state's immediate cash flow while a state is waiting for revenues. States can also take actions to increase non-tax revenues such as fees, permits, and user charges which can often be increased less visibly because they im-

part only particular constituencies. Finally, states sometimes sell specific assets in order to raise cash. Often these asset sales consist of selling a state asset to a quasi-government agency which then leases the facility back to the government.

Why the sector sometimes falters

Despite the extent of both explicit reserves and implicit reserves which are tapped during business cycle contractions, there often comes a time when states exhaust their reserves. At that time, discretionary behavior switches to rebuilding government surpluses through tax hikes and spending cuts. The particular timing of this transition from maintaining spending levels and tax rates to rebuilding surpluses is dependent not only on the extent of the business cycle contraction, but also on special conditions such as trends in federal aid and the disparity in regional conditions.

Evidence that the state and local sector can spend beyond its means for only a limited time can be seen from the aggregate behavior of expenditures and receipts following the trough of the contractions. In all three cases beginning with the 1973-75 recession, receipts have shown rapid growth in the first several quarters following the trough while expenditure growth either flattens or turns down (see Figure 1). A number of conditions explain if, how, and when a state or local government moves from expansionary to contractionary behavior.

Federal aid

Federal aid has sometimes acted as a counter balance to falling own-source revenues during business cycle contractions. However, the behavior of federal aid over the last four contractions has been far from consistent (see Table 1).¹¹ During the current contraction, this behavior has taken an about face with grants up over 21 percent largely due to a surge in federal Medicaid support.

Election cycle

Another special factor influencing the state and local response to recession is the election cycle. Some analysts claim that the odds that tax increases will be passed in a given year depend in part on where the year falls in the state election cycle.¹² Assuming that elected officials behave as incumbency maximizers and that tax increases are unpopular with voters, tax increases will be approved in those years in

which approval will have the least repercussion on incumbency. In terms of the election cycle it means that tax increases are most likely in the year following the gubernatorial election. The next most likely choice is the year following the mid-term legislative elections.

The 1990-91 recession

During the recent recession, state and local discretionary actions with regard to revenues point up yet another set of special conditions which influence the timing and extent of state and local behavior with respect to contractions. Unlike the previous two downturns, state governments made significant discretionary moves to raise tax rates, expand tax bases, and raise user fees in the year *preceding* the 1990-91 recession. According to estimates, \$5 billion in discretionary revenues were raised in both fiscal 1989 and fiscal 1990.¹³

A skewed and out-of-sync deterioration in regional economies accounts for much of this behavior. The U.S. economy began to slow in 1989, especially (and earlier still) in the New England and MidAtlantic regions. Moves to hike tax revenues were undertaken at the beginning of calendar year 1990. A distinct Northeast incidence of discretionary revenue moves can be discerned. Massachusetts, New Jersey, New York, and Vermont all expanded individual income tax rates or bases, or accelerated withholding. Discretionary sales tax actions were undertaken by New Jersey, Massachusetts, Rhode Island, and New York.

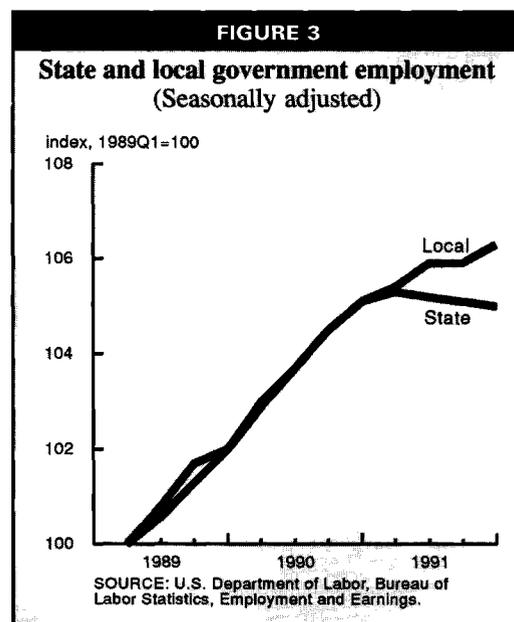
Rapidly rising costs of health care in the later 1980s also helped to create the need for discretionary revenue hikes. The cost of providing public health care through Medicaid rose inexorably along with the costs of providing health care as a fringe benefit to public employees. Finally, the prison population doubled during the 1980s so that expanded prison capacity could no longer be delayed.

The build-up in fiscal pressures prior to the contraction, along with continuing regional problems in the Northeast and expanded fiscal travails in defense oriented states such as California, ensured that discretionary revenue hikes were once again undertaken during fiscal 1991. An estimated \$5 billion in additional revenue hikes were carried out in fiscal 1991. A widely accepted prognosis for a tepid economic recovery all but ensures that states will embrace discretionary measures again in 1992. Short of

an unexpected robustness occurring during the economic recovery, the recent period will be remembered as one in which the discretionary revenue actions of state governments were carried out prior to, during, and subsequent to the recession.

But even more than revenue actions, the extended length of fiscal stress has induced discretionary spending cuts by state and local governments. Perhaps this should not be surprising given that rising program costs have been an important source of fiscal stress; governments have attempted to short circuit fiscal pressures from the very programs that have been rising the fastest. For example, the State of Michigan has eliminated General Assistance aid to nearly 80,000 state residents and Massachusetts has trimmed the number of Medicaid benefits it offers.

While it is too early to be definitive, there is reason to believe that a fundamental change in direction has taken place once again for the sector. Much as the federal government has moved away from the idea that it should be all things to all people, state and local governments may be looking toward an era of shrinkage rather than expansion. Payroll employment has levelled off over 1991, while many more state and local governments are planning future cutbacks (see Figure 3). In response to an economic recovery period characterized by weak overall job growth, the citizenry will continue



to look to state and local government to provide services, but their willingness to pay for those services will be closely guarded. As a result, there will be greater pressures on governments to provide existing services with cheaper delivery mechanisms or to come up with more innovative services themselves.

Seventh District reactions to the 1990-91 recession

With the onset of the recession, budgetary stress in the District ranged from severe in Michigan to mild in Wisconsin. When the current contraction began in the third quarter of 1990, four of the five District states had already begun their 1991 fiscal year. As budgetary stress began to accelerate, potential fiscal action focused on changes in the FY92 budget. After considerable discussion, none of the five District states passed any major tax increases. Taxes such as income and sales were largely untouched. For example, Illinois' most significant tax increase was an extension of the state's personal income tax surcharge (raising the permanent rate from 2.5 to 3 percent) which had been in effect since 1989.¹⁴ Iowa's only tax increase was a hike in its state cigarette tax. Indiana, aside from transferring some program expenses to bond funds, enacted no major tax hikes although it did renew a vehicle tax that had been set to expire. Wisconsin passed a biennial budget for FY92 and FY93 which calls for no significant tax increases. Even Michigan, whose economy has been hard hit by the slump in the auto industry, has adopted a FY92 budget that does not contain major tax increases. District fiscal actions so far appear to mirror District state behavior during the 1980 and 1981-82 recessions, when District states put off major tax hikes until the second half of FY83.¹⁵

The behavior of the District states during FY91 and the first half of FY92 appears to represent the early stages of adapting to the contraction. Having initially been less impacted by the recession than other parts of the nation, most of the states entered FY91 with reasonable budget reserves and fiscal flexibility. As conditions worsened, most of the states turned to accounting and other fiscal maneuvers to balance their books. Illinois for example chose to roll Medicaid expenses and some other vendor payments into the 1992 fiscal year. Indiana transferred \$40 million in prison expenditures from the General Fund to bond funds.

Michigan has favored employee furloughs to balance expenditures. All of the states adopted hiring freezes and travel restrictions.

Critical budgetary pressures are now building for the sector in general and are forcing some states to revise their FY92 budgets. Fiscal conditions were deteriorating prior to the falloff in general business conditions so that the reserve position of state governments is weak or nonexistent. District states budgeted for 1992 under the assumption that economic recovery, however modest, would help to lift revenues and maintain expenditures. However, recent indications from statehouses are that 1992 revenue projections have been too sanguine, so that elected officials are mapping out a change of course.¹⁶

How will District governments respond in the future?

District states would like to refrain from draconian spending cuts and major revenue hikes during the coming months. The results of regional and, in particular, District government action during the early 1980s suggests that, even under severe fiscal stress, state and local governments can sometimes forestall such budget-balancing actions through one or more fiscal years. Despite both economic stress and sharply falling aid from the federal sources in the 1980s, for example, Seventh District governments refrained from the most dramatic discretionary moves until well after the downturn's trough. Nevertheless, the recent environment suggests that District governments have more than likely breached the thresholds which require more profound fiscal remedies. Many governments in the District are already cutting payrolls and programs so as to preserve a minimum of fiscal integrity.

Today's budgetary pressures in the District differ from those of the early 1980s. To a greater extent, pressures are arising from the spending side of the ledger as much as from revenue shortfalls. Accordingly, as budget remedies become necessary during 1992 and beyond, spending cuts rather than tax hikes will be favored. Either cuts in spending or increases in state and local revenues are likely to act as a drag on the rate of recovery in the District during 1992.

Some of the spending pressures, such as spiralling health care costs and the need for suitable prison space, are partly beyond state

government control. Even so, governments will need to identify and reach a consensus on spending programs that can be reduced. Nevertheless, as spending cuts become deeper and therefore more difficult to agree on, such a

strategy may prove inadequate. At that time, District governments will once again consider major tax hikes and other revenue enhancements in order to balance their budgets.

FOOTNOTES

¹Crider (1978), p. 9. Also, Shannon (1985) p. 341.

²Humphrey-Hawkins, "Full Employment and Balanced Growth Act of 1978." The bill defines the role of federal policy as encouraging full employment.

³Few would argue that state and local governments should carry the primary responsibility for economic stability. Insofar as the benefits of local fiscal action spill over local boundaries, such a decentralized system could easily result in an inadequate countercyclical stimulus. Nevertheless, state and local governments in many states and regions are reportedly accelerating capital spending plans as an economic growth measure which is intended to address the current economic sluggishness. See Enos (1992), p. 1.

⁴National Conference of State Legislatures, *State Budget and Tax Actions 1990*.

⁵State Policy Research, Inc., 1991.

⁶National Association of State Budget Officers/National Governors Association, *Fiscal Survey of the States*, 1988, p. 15.

⁷Advisory Commission on Intergovernmental Relations, *Significant Features of Fiscal Federalism*, Vol 1, 1991.

⁸For further discussion of rainy day fund behavior see Testa and Mattoon (1992).

⁹National Association of State Budget Officers/National Governors Association, *Fiscal Survey of the States*, September 1989.

¹⁰State Policy Research Inc., 1990.

¹¹See Gold (1991).

¹²See Mikesell.

¹³National Association of State Budget Officers/National Governors Association, *Fiscal Survey of the States*, various years.

¹⁴Illinois made permanent the 1989 income tax surcharge which had been scheduled to expire. The 20 percent surcharge may be reduced to 10 percent in FY94. Revenue raised through the surcharge will be distributed to education, municipalities, and the state. The surcharge on the state's corporation business tax was also extended.

¹⁵For more on Seventh District behavior in the 1980 and 1981-82 recessions see Testa and Mattoon (1992).

¹⁶For example, the Illinois legislature recently approved the Governor's plan to close an impending gap in the 1992 budget. Under the plan, the state will cut \$273 million in services, and it borrowed \$500 million to pay a backlog of unpaid bills. Aside from transfers, no revenue features were included in the plan.

REFERENCES

Advisory Commission on Intergovernmental Relations, *Significant Features of Fiscal Federalism*, Vol. 1, 1991.

Crider, Robert A., *The Impact of Recession on State and Local Finance*, Academy of Contemporary Problems, Urban and Regional Development Series No. 6, Columbus, Ohio, 1978.

Enos, Gary, "Governors: bring back the WPA," *City & State*, January 27, 1992.

Gold, Steven, "Changes in state government finance in the 1980s," *National Tax Journal*, Vol. XLIV, No. 1, 1991, pp.1-19.

Mikesell, John, "Election periods and state policy cycles," *Working Papers in Public Finance and Economics*, Indiana University.

National Association of State Budget Officers/National Governors Association, *Fiscal Survey of the States*, various years.

National Conference of State Legislatures, *State Budget and Tax Actions 1990*, Denver, 1990.

_____, *State Budget and Tax Actions 1991*, Denver, 1991.