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# STABILIZING STATE AND LOCAL FINANCE

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The initial effect of a marked business recession on state and local governments would be a decline or a prospective decline in the yields of state and local taxes. This in turn would necessitate budgetary adjustments affecting appropriations, tax rates, borrowing, the use of accumulated reserves, and other means of financing. The kind of adjustments made by each individual government would determine whether in the aggregate state and local governments made a net contribution toward recovery, whether their influence on the economy was neutral, or whether they added momentum to the downward movement.

Whatever the nature of state and local recession adjustments, their influence on the total economy is likely to be moderate. State and local purchases of goods and services currently constitute only about 7 per cent of the national aggregate of all purchases of goods and services. A 20 per cent variation in state and local expenditure, other factors remaining the same, would, accordingly, change the gross national product by less than  $1\frac{1}{2}$  per cent. This relatively low ratio, however, should not lead us to underrate the importance of stability in state and local finance. We are dependent upon state and local governments for vital services whose value cannot be measured solely by the effects of these services on aggregate demand. Fiscal programs which help to maintain the adequacy of state and local services in periods of recession are eminently worthwhile for their own sake.

#### Types of Recession Adjustments

Confronted by an actual or prospective decline in tax yields, state and local governing bodies may seek to adjust their budgets to the new fiscal situation by adopting at least one of the following general policies:

A. They may seek to reduce expenditure by the same amount that revenue has declined, keeping legal rates of taxation and utilization of reserves and borrowed funds at pre-recession levels.

B. They may endeavor to maintain their current rate of expenditure. This will require one or more of the following types of action:

(1) increasing legal rates of taxation or imposing new taxes, (2) securing additional grants-in-aid, (3) using up accumulated reserves more rapidly, and (4) expanding their volume of borrowing.

C. With a view to making a positive contribution toward recovery, state and local governing bodies may seek to expand expenditure during the recession. This policy will require more extensive resort to the types of action called for under policy B above. Taxes will have to be more steeply raised; additions to grants-in-aid will have to be more liberal; reserves will have to be drawn down more rapidly; a still greater expansion of indebtedness will be required.

D. As an alternative or as an additional stimulus to recovery, a policy of incentive tax reduction may be adopted. This would involve reducing the effective rates of selected taxes below their prerecession levels. A policy of incentive tax reduction will require either drastic cuts in expenditure or types of action identical with those required to permit an expansion of expenditure, excepting, of course, tax increases.

It will be noted that all but the first of the four general policies which have just been outlined are not unique policies but families of policies. Thus the general policy of maintaining expenditure during a recession may be implemented in four different ways: through taxation, through grants-in-aid, through use of reserves, and through borrowing. If only one of these expedients is to be employed, four different choices are offered. If two of them are to be concurrently employed, there are six different choices; and if three of them are to be used, there are four different possibilities. A final possibility is that all four expedients may be used together. It should also be noted that in case more than one of the expedients are used, the relative degree of reliance placed on each may be varied.

Each of these policies or subpolicies involves one or more basic types of fiscal action. These are expenditure reduction, tax increases, increased reliance on reserves, expansion of borrowing, expansion of expenditure, incentive tax reduction, and additional grants-inaid. In order to determine which policy or subpolicy will have the least favorable and which the most favorable influence on the general level of economic activity, it is necessary to ascertain the effect on aggregate demand of each of these basic types of fiscal action. The individual effects of the fiscal action associated with each subpolicy must then be added up.

A realistic appraisal of what state and local governments might do in the event of a recession cannot be limited to the effects of fiscal adjustments on aggregate demand. Depending on their financial and other circumstances, individual governments are subject to practical limitations with respect to the types of recession action they are in a position to take. What is more to the point, state and local governments exist primarily to promote the general welfare, and government actions which may be well adapted to raise the level of expenditure and employment are not necessarily actions which will conserve the long-term general welfare.

With the above considerations in mind, we can now proceed to examine the effects of specific types of fiscal action, each type being considered in conjunction with the other types of action with which it is necessarily linked as part of a particular policy.

# Expenditure Reduction

Expenditures may be reduced in order to permit an equivalent amount of tax relief. In a recession, however, it is more likely that expenditure cuts will be made in order to offset a decline in revenue, in which event nominal rates of taxation may continue unchanged. Only this second case will be considered here.

Expenditure reductions which are not passed on to the public in the form of lower taxes obviously have an adverse effect on aggregate demand. They reduce government purchases of goods and services with no compensating increase in private purchases. The net result of such action is to give the economy a further push downward.

It does not follow from the above, however, that efforts to root out waste and inefficiency and to eliminate government activities which have lost their utility should be suspended during a recession. A business downturn generally brings new needs for public assistance. Savings resulting from improved efficiency may be used to meet these needs. They may also be used to remedy deficiencies in other facilities and services vital to the general welfare. Alternatively, the savings may be passed on to the public in lower taxes. In all of these cases the effect on aggregate demand will be neutral and the general welfare will be enhanced.

Aside from their unfavorable effect on aggregate demand, expenditure cuts which lower standards of public service or which result in a deterioration of public facilities have other untoward consequences. To the extent that the cuts are applied to services and facilities necessary to business operations, the task of recovery is rendered more difficult. To the extent that support of public education is reduced, irreparable damage may be done to the youth

who are unfortunate enough to be of school age at the time the recession occurs. A cut in health and welfare services is likely to aggravate the unrest and discontent which is the normal accompaniment of a recession. In short, as a method of adjusting to a business decline, expenditure reductions without offsetting tax reductions should be avoided, if at all possible.

# Tax Increases

There are two distinct recession policies under which the expedient of increasing legal rates of taxation or of adding new taxes might be employed. Under the first policy an increase in tax revenue would be sought in order to finance an equivalent expansion of expenditure. Under the second and more likely policy, taxes would be raised in order to offset a recession-induced decline in revenue and to maintain rates of expenditure at their former levels.

Under the first policy the effect of a tax increase on aggregate demand is apparently neutral. The tax increase will probably reduce private purchases of goods and services by at least as much as government expenditures are increased. Certain other aspects of this policy will be considered below.

The effect of the second policy on aggregate demand is definitely adverse. When a government increases its collections from the public merely to maintain its preexisting level of expenditure, it reduces aggregate demand. It diminishes the amount of purchasing power available for personal consumption and private investment with no compensating increase in its own purchases of goods and services. This result does not, of course, follow where the new revenue collections represent private funds that would not otherwise be used. This exceptional case may be dismissed as far as most state and local governments are concerned. The limited tax sources at their disposal bear down heavily on the income and expenditure of the lower and middle income groups, who are not likely to have idle funds.

Under recession conditions an upward adjustment of taxes not only tends further to reduce the gross national product, but it has an unfavorable impact on business incentives, creating uncertainties which slow up the process of recovery. Tax increases during a business downturn are unquestionably badly timed, but unless state and local governments have previously followed long-run budget policies which have taken into consideration the contingency of a

recession, such increases may represent the only way of financing high-priority services.

## Stabilization Reserves

Governments can accumulate reserves only by spending less than they receive. The size of their reserves, if any, at the beginning of a recession will therefore depend upon their past budgetary policies. To the extent that they have any reserves when a recession hits them, such reserves may, under the appropriate conditions, be used to implement three different objectives: to maintain expenditures at current levels without increasing taxes, to permit a temporary expansion of expenditures without a tax rise, and to permit a temporary reduction of taxes without cutting expenditures.

When reserves are used to fill in the gap resulting from a revenue decline and to maintain expenditures at current levels without increasing tax rates, the effect on aggregate demand is neutral. Government purchases of goods and services remain as they were before and, since tax rates continue the same, private purchases of goods and services are likewise unaffected. In this case the reserves perform a protective function. They make it unnecessary to give the economy an additional downward thrust through expenditure cuts or tax increases.

When reserves are used to finance a temporary expansion of expenditure, the economy is given an upward boost. Government purchases of goods and services are increased with no offsetting reductions in private purchases. There are, however, certain limitations on the use of reserves to finance an expenditure increase.

## Expansion of Borrowing

Private demand for loanable funds usually shrinks during a recession, and in this situation an expansion of public borrowing is not likely to reduce the volume of private purchases financed on a credit basis. In the recession programs of state and local governments, increased borrowing may therefore have the same effect on aggregate demand as the use of reserves. When a government increases its borrowings in order to maintain its current rate of expenditure without raising its taxes, the effect on aggregate demand is neutral. When it borrows to finance an expansion of expenditure, it makes a positive contribution to aggregate demand.

For practical reasons, borrowing is likely to have a more important role in state and local recession adjustments than that of reserves. Many governments with no reserves have unused borrowing capacity. Even in the case of the most thrifty governments, reserves are relatively small compared with borrowing potential. But borrowing involves a future cost in interest and amortization charges. Moreover, there are restrictions of various kinds on the purposes and amounts of government borrowing.

Although government spending of borrowed funds during a recession is conducive to employment stability, this does not justify borrowing for any and all purposes. Borrowing to defray current operating expenses and current charges is undesirable under any circumstances, since it means that future taxpayers will be saddled with debt service charges for which they will receive no compensating benefits. Borrowing should as far as possible be restricted to the financing of durable capital facilities which will yield worthwhile services to the public during the period in which the applicable debt charges are being met. Even in this case, however, the fact that a project would be useful and that its construction would provide employment does not constitute sufficient justification for borrowing.

Bond-financed projects must meet the same budgetary tests as tax-supported activities, since bond projects will ultimately have to be paid for through taxation or some other form of revenue. The significant questions are: Is the need for the project as urgent as the need for other projects? Will the benefits which the project yields to the public be worth their cost in debt service charges? and Has the public the ability and the willingness to pay the applicable charges over the indicated span of years? Projects which meet the above tests cannot be dreamed up overnight. It is only through the advance preparation of a long-term capital budget that a sound selection can be made.

It goes without saying that bond issues should never exceed the reasonable life expectancy of the improvements they are intended to finance. Otherwise taxpayers may find themselves paying debt service charges on dead horses. To save interest cost, moreover, governments should in normal years finance at least the annually recurring part of their capital expenditure from current revenue. Borrowing should in general be used to finance the peaks in the long-term capital budget and to maintain capital expenditures at their programed amount during a period of recession and revenue decline.

# Stepping Up Expenditure

The case for increasing government expenditure during a recession centers around the premise that, as private demand recedes, governments must expand their purchases of goods and services to help fill in the gap. Ruling out the possibility of federal aid, the funds for a stepped-up program of expenditure can be obtained in only two ways: by heavier taxation or by recourse to reserves and borrowing. As has already been pointed out, higher taxes are likely to curtail private demand still further and will in addition have unfavorable effects on business incentives.

If the stepped-up expenditure program is financed by means of reserves and borrowing, its wisdom would appear to depend on the purpose for which the new funds are spent. To supply a more costly program of current services during recession years than taxpayers have the ability and willingness to pay for in normal years is obviously to invite future trouble. Under any circumstances borrowing to finance current expenditure is unwise.

A good case may be made for a stepped-up, bond-financed program of expenditure for capital outlays, provided all of the projects included meet the budgetary tests previously set forth. A government which has a master plan of development based on adequate surveys, which has a shelf or reserve of needed public works conforming to the master plan, and which follows the procedures of long-range budgeting should be in a safe position to advance the construction dates of certain projects, if a decline in construction costs or other developments during a recession should make such a change worthwhile. Under these circumstances a stepped-up construction program not only would contribute toward employment stability but would save the taxpayers money.

### Incentive Tax Reduction

Proposals to reduce taxes during a recession are commonly based on the assumption that tax reduction will increase personal consumption and private investment expenditure, thus expanding employment. This result can hardly be expected to occur when tax reduction is accomplished by cuts in government appropriations. In that event it would seem highly probable that the ensuing decline in government purchases of goods and services would fully cancel the increase in private expenditure. Indeed, to the extent that any part of the tax relief given is not used for consumption or investment but is retained by its recipients in the form of idle cash, the net result of tax reduction based on budget cuts would be a net decline in aggregate employment.

When funds needed for tax reduction are obtained by borrowing or through the use of accumulated surplus, it is still a moot question whether larger and prompter effects on employment might not be obtained by government expenditure of these funds on a stepped-up program of public works. There is, of course, the possibility that tax reduction would so encourage taxpayers as to lead them to increase private expenditure by more than the amount of their tax relief. The odds for and against this eventuality are, however, not determinable.

Assuming that a government has adopted the proper rates of taxation for a normal or average year, any reduction from this level financed by mean of surpluses or by borrowing must necessarily be temporary. As soon as the emergency is over, rates will have to be restored to their normal level. Where tax relief has been based on borrowing, the new normal level of rates will, in fact, have to be somewhat higher than the original normal rates in order to take care of debt service charges on an unproductive addition to the public debt. It is more difficult to raise taxes than it is to reduce them; and at least so far as state and local governments are concerned, temporary tax reduction for the sole purpose of stimulating employment would not seem to be worth the risks and costs involved.

# Additional Federal Aid

The effect on aggregate demand of extending additional federal aid to state and local governments during a recession depends almost entirely on how the federal government obtains the funds required for this purpose and on the disposition which state and local governments make of them. If the federal government obtains the requisite funds by reducing its own expenditures, and if the states and localities use their additional aid merely to offset their recession-induced revenue losses, maintaining their purchases of goods and services at former levels, the net result is to reduce aggregate demand. If states and localities use the federal aid to expand their expenditure, the net effect on aggregate demand is neutral. The only change is the replacement of a given amount of federal expenditure by a like amount of state and local expenditure.

The effects are substantially the same when the federal govern-

ment obtains its funds through new or higher taxes. In this event, private purchases of goods and services are reduced and, if state and local governments employ the new aid solely to maintain their current levels of expenditure, aggregate demand will be reduced. If the tax-financed aid is used to expand state and local expenditure, the effect on aggregate demand will be neutral, but a certain amount of state and local expenditure will now have been substituted for a like amount of private expenditure.

It is only when the federal government obtains its funds through deficit financing that federal aid is capable of exercising a sustaining influence on the economy. When funds so obtained are employed by the states and localities to maintain pre-recession levels of expenditure, the effect on aggregate demand is neutral, but state and local tax increases and expenditure cuts which would have reduced aggregate demand may thereby have been averted. When aid based on borrowed funds is used to expand state and local expenditure, aggregate demand receives a net addition.

If consideration is limited to the effect on aggregate demand, it would appear to be a matter of indifference whether borrowing for state and local purposes is performed by the federal government or by the governments most directly concerned. From the standpoint of political philosophy, however, the difference is important. Those who believe that state and local governments should preserve a maximum degree of independence in matters not directly affecting the national interest will prefer state and local borrowing. This raises a practical question which is reserved for later consideration. Under the conditions which now govern the marketing of state and local securities, will state and local governments be able to expand their borrowings during a recession to the degree needed to enable them to maintain and perhaps to expand their total expenditure?

# **Requisites for Stability**

The preceding analysis indicates that the two most common ways of adjusting state and local budgets to a recession—expenditure cuts and tax increases—are likely to exert a depressing influence on the economy. In the face of declining tax yields, the only way in which state and local governments can maintain or expand their expenditures without adverse effects on aggregate demand is by more extensive reliance on reserves and borrowing. Since it is probable that reserves will be small, reliance must rest mainly on an expansion of borrowing. Incentive tax reduction and additional federal aid must also be based on borrowing, if they are to accomplish their intended purpose.

But borrowing is subject to limitations. In the case of state and local governments, it is not desirable to borrow to defray current expenses, current charges, and current obligations. With a few possible exceptions, borrowing should be restricted to the financing of durable capital facilities. This additional restriction complicates the problem of budgetary adjustment. During a recession, state and local governments must avoid expenditure cuts and tax increases; they must maintain or expand their total expenditure by increased borrowing; but they must not increase their long-term indebtedness for purely current purposes.

To satisfy all of the above conditions simultaneously, a government must either possess unusually ample reserves or approach a recession with revenue receipts substantially in excess of current expenditure needs. A partial pay-as-you-go plan for financing capital projects offers a rational method of providing both the required revenue excess and an expansion of borrowing for capital outlays during a recession.

A partial pay-as-you-go plan means that revenue in a normal nonrecession year must be large enough to cover not only all expenditure on current account but a sizable proportion of capital expenditure as well. Where a plan of this kind has been followed, revenue normally used to finance capital outlays may be shifted to the support of current activities when a recession occurs. Current expenditures may thus be maintained at pre-recession levels without necessitating a rise in taxes. If the proper advance preparations have been made, a stepped-up program of capital construction may be financed on the basis of expanded borrowing.

# The Present Situation

The main defenses of state and local governments against a recession would appear to be: a substantial margin of revenue which is presently being utilized for capital outlays but which might be shifted to the support of current services should the necessity arise; accumulated reserves; and the capacity to expand borrowing as needed to maintain or to increase the pre-recession volume of capital construction. These defenses must, for the most part, be built up in times of high prosperity. To attempt to provide a revenue surplus and to accumulate reserves after a recession has arrived would obviously be self-defeating.

This leads us to inquire into the present state of our defenses. To what extent are state and local governments now financing their capital outlays on a pay-as-you-go basis? How much of the revenue so used could be shifted to the support of current services should the need arise? What is the present size of state and local reserves and what restrictions, if any, would apply to their spending? Are there any impediments which would limit or slow up an expansion of state and local borrowing during a recession? Finally, what can state and local governments do in the period immediately ahead to strengthen their recession defenses?

For answers to these questions we must rely mainly on the annual compilations of the Governments Division of the Bureau of the Census, which cover only state governments and governments of cities with populations of 25,000 or more. These units of government originally receive about 70 per cent of all state and local revenue. The latest period for which published data are at hand is the fiscal year which ended in 1952. Unsatisfactory as these data are, they yield important information.

#### Revenue

At first glance, the revenue situation of state governments appears fairly bright. Excluding the receipts of insurance trust funds, aggregate state revenue from all sources reached a total of \$14.4 billion in 1952. Expenditures for current purposes—including current operation, assistance and subsidies, payments to other governments, interest, debt redemption, and contributions to employee retirement funds—came to a total of \$12.5 billion. This left a margin of \$1.8 billion, or 13 per cent of total revenue, available for capital outlays and increase of reserves. The relative size of the revenue margin varied, of course, from state to state. Thus it was over 20 per cent of total revenue in Minnesota and Texas but less than 6 per cent in New York and Pennsylvania.

When these revenue margins are further analyzed, however, it becomes apparent that they are attributable almost entirely to the operations of state highway funds. For all of the states combined, highway revenues exceeded highway expenditures exclusive of capital outlays by nearly \$1.6 billion in 1952. This indicates an average revenue margin of only 2 per cent for all other state funds. In not a few states general fund revenue in 1952 was barely sufficient to cover current expenditure needs. Unless these states find it possible to shift some of their highway revenue to the support of other func-

tions, they will be obliged to make expenditure cuts or to raise taxes in the event of a recession.

In only four states—Delaware, Georgia, New York and Rhode Island—are gasoline tax revenues covered into the general fund. In all other states they are dedicated to specific purposes or segregated in special funds. The Hayden-Cartwright Act of 1934, moreover, imposes a penalty with respect to the allocation of federal highway aid on states that divert highway-user imposts to nonhighway uses.

In the 481 cities with populations of 25,000 or over, the revenue situation in 1952 was as follows: Total revenue, excluding the receipts of insurance trust funds, amounted to \$6.4 billion. Total expenditures, excluding capital outlays, totaled \$5.8 billion. The revenue margin available for capital outlays or increase of reserves was therefore \$600 million, or about 9 per cent of total revenue.

The ratios for individual cities, however, showed a wide range of divergence. On the basis of the method of calculation used for the present purpose, which does not take into account amounts drawn from reserves, Philadelphia had an indicated revenue deficit. New York City had a revenue margin of less than 3 per cent. Los Angeles and Charlotte, North Carolina, on the other hand, had revenue margins in excess of 20 per cent. We are thus obliged to conclude that unless some of the cities increase their present revenue margins, they will be forced either to reduce their expenditure or to impose additional taxes in the event of a recession.

### Reserves

The total cash and security holdings of all state governments, excluding offsets to long-term debt and the holdings of insurance trust funds, amounted to approximately \$7.7 billion at the end of the fiscal year 1952. This was equivalent to about 53 per cent of the aggregate of all state revenue for that year. A quick look at individual states shows Minnesota with cash and security holdings equivalent to 125 per cent of its revenue; California with the equivalent of 76 per cent; and Pennsylvania and New York with holdings representing about 30 per cent of total revenue.

The available statistics give no clue of the extent to which these liquid assets would be available for the support of current services in the event of a revenue decline. There is evidence, however, that at least a fifth of the assets in question belong to highway funds. Another substantial fraction probably represents the proceeds of bond issues pledged for specific nonhighway construction projects. Still another fraction presumably represents past revenue surpluses which have already been appropriated and against which commitments for construction have already been made.

The 481 cities with populations of 25,000 or over had cash and security holdings to the amount of \$2.5 billion at the end of the fiscal year 1952. This amount does not, of course, include offsets to long-term debt and the assets of insurance trust funds. For all cities combined, the average ratio of liquid assets to revenue was 39 per cent. In the case of Philadelphia, however, such assets represented 67 per cent of revenue, whereas in the case of New York City they represented only 17 per cent. As in the case of similar liquid reserves held by the states, there is no way of ascertaining from the census statistics the extent to which these reserves are already subject to commitments, or the extent to which they represent minimum requirements for working capital.

### Borrowing Power

The capacity of state and local governments to expand their borrowing is undoubtedly greater at the present time than it was in the 1920's and early 1930's. Striking evidence of this is furnished by the lower ratio of interest costs to total revenue. In 1929 the aggregate interest payments of all state and local governments represented about 10 per cent of their total revenue. In 1952, despite an 80 per cent increase in state and local indebtedness, interest payments represented less than 3 per cent of total revenue.<sup>1</sup>

But serious obstacles to the prompt expansion of state and local indebtedness in the event of a recession still exist. In most of the states the incurring of debt by state and local governments is subject to both constitutional and statutory restrictions. The constitutions of a few states forbid their state governments to contract any debt for any purpose whatsoever. In other states an affirmative referendum vote is required to legalize a bond issue. A common form of statutory restriction limits local indebtedness to a specified percentage of the total assessed value of the taxable property within the local jurisdiction.

The above obstacles are not necessarily insurmountable. Bond elections may be held to authorize bonds which are not to be issued immediately. Given time, statutory debt limits may be liber-

<sup>&</sup>lt;sup>1</sup> Survey of Current Business, Dept. of Commerce, National Income and Product Series, Tables 8 and 9.

alized through legislative enactments. If this is not considered desirable, assessment ratios and assessed valuations may be raised. Debt limitations commonly apply only to so-called "full faith and credit debt," i.e. obligations for which the credit of the issuing government is unconditionally pledged. Nonguaranteed securities which do not carry the full faith and credit pledge are generally exempt from legal debt limitations. The most common type of nonguaranteed obligation is the so-called revenue bond. The volume of revenue bonds outstanding has been growing rapidly. Last year they accounted for approximately a third of all new state and local long-term issues.

The so-called "government authority," which usually issues only revenue bonds, represents a convenient device for circumventing both exhausted debt limits and constitutional restrictions on borrowing. The New York-New Jersey Port Authority is an institution of long standing. There are now scores of toll highway and bridge authorities. School building authorities are now functioning in Pennsylvania, Georgia, and Maine. School buildings are leased to local jurisdictions and the bond issues of the authorities are secured by leasehold rental payments financed from local appropriations.

Another obstacle which might prevent state and local governments from expanding their borrowing to the required degree during a recession is the fact that small units of government issuing securities in small volume and at rare intervals are at a disadvantage in selling their bonds. The states and larger cities ordinarily find a ready market for their securities, but smaller units of government are frequently forced to rely exclusively on their local banks and local capitalists. When they attempt to tap the national capital market, they are penalized by higher interest rates which may or may not accord with their actual financial condition.

One way of improving the credit position of the small government unit is the marketing of all local securities through a central state agency. This method has been successfully employed in North Carolina for the last two decades. All local governments in the state must secure the approval of the North Carolina Local Government Commission in order to borrow for any purpose whatever. As a prior condition to its approval, the Commission requires the submission of financial and economic data bearing on the ability of the petitioning government to service the proposed new debt. Centralized marketing permits the Commission to consolidate small

bond issues into blocks large enough to interest the more important national underwriting groups. The Commission's knowledge of the sources of investment funds, both within and without the state, has resulted in a marked reduction in interest costs for the smaller units of government.

State loans to counties and school districts, from funds secured through the sale of state bonds, represent another way of solving the credit problem of the small political unit. The state of California recently put into effect a \$435 million program of state capital outlay loans to local school districts. This program was financed by bonds secured by the full faith and credit of the state government. A similar program financed through the sale of state bonds was adopted by the state of Washington. Under the Washington plan, state loans to local school districts for capital outlays are repayable within a period of ten years, circumstances permitting. Instead of loans, a number of states, including Delaware, Maryland, North Carolina, and South Carolina, are making grants-in-aid to local jurisdictions for school construction, the funds for this purpose being obtained through the sale of state bonds.

A final doubt concerning the capacity of state and local governments to expand their borrowing during a recession relates to the ability and willingness of investors to purchase an expanded volume of security issues on reasonable terms. However, state and local governments are in a better position than they have ever been before to purchase a large share of their own issues. State and local governments now hold \$12.5 billion worth of federal securities in their various trust funds and reserves. Assuming that the Federal Reserve System will support the market for federal securities, state and local governments should be able to substitute their own new issues for a portion of their federal holdings if necessary.

State and local employee retirement funds now have assets in excess of \$6 billion and their reserves are growing at the rate of \$700 million per year. These funds furnish a market for state and local bonds which, if need be, could be extended. The Controller of New York State recently purchased, at yields below the current market rate, ten bond issues of rural school districts, amounting to \$20 million, as investments for public employee pension funds. Similarly, in Pennsylvania, the state School Building Authority placed over \$16 million of 3 per cent school revenue bonds directly with state pension funds.

## For Action Now

The best time to prepare for a recession is a period of rising prosperity, but there are certain steps which state and local governments can take at any time to strengthen their recession defenses. These steps may be summarized as follows:

#### PARTIAL PAY-AS-YOU-GO

1. As a means of stabilizing their current services and of avoiding expenditure cuts and tax increases during a recession, state and local governments should seek to place themselves on a partial pay-as-you-go basis with respect to the financing of capital outlays during nonrecession years.

2. In a period of economic uncertainty, governments should strive to secure the revenue margin necessary for the above purpose through the elimination of waste and inefficiency. The resulting savings should not be allowed to reduce total expenditure but should be used to finance new and needed additions to the capital construction program.

3. State governments should consider ways and means of temporarily shifting to the support of current government services a portion of the highway revenue now used for construction purposes as a means of averting expenditure cuts and tax increases during a recession. An expanded bond-financed program of highway construction and the assumption by state general funds of amounts of highway indebtedness equal to the amounts of highway revenue diverted should meet the requirements of the Hayden-Cartwright Act.

#### RESERVES

4. State and local governments with accumulated revenue surpluses appropriated but not as yet spent for construction projects should consider the advisability of financing a portion of such projects through bond issues in order to create reserves which could support current services during a recession.

#### BORROWING

5. The states and localities should prepare shelves or reservoirs of needed public works scheduled in order of urgency with a sufficient number of projects in the blueprint stage to permit a prompt expansion of construction work should that become desirable.

6. State and local governments should ascertain now what ob-

stacles, if any, would prevent or slow down an expansion of their borrowing during a recession and should make appropriate advance preparations to remove or to circumvent them. Whether such preparations call for the advance approval of bond issues, the liberalization of obsolete debt limitations, the creation of authorities, or other measures, will depend on the circumstances of each case.

7. State governments should develop plans to assist local governments in maintaining or expanding their construction programs during a recession. In this connection they should consider such devices as the marketing of local bonds through central state agencies, the purchase of local securities by public employee retirement funds, state guarantees of local bond issues, and state loans or grants for local construction financed on the basis of state bond issues.

### COMMENT

#### C. HARRY KAHN, National Bureau of Economic Research

I cannot entirely agree with Heer's appraisal of the importance of the state-local sector in a prospective downturn of economic activity. It is true that state-local expenditures for goods and services constitute at present only 7 per cent of the gross national product. However, their importance may also be measured in relation to such strategic variables as gross private domestic investment and federal government expenditures for other than national security purposes. State-local expenditures, measured in GNP terms, are one-half as large as gross private investment and three times as large as federal civil expenditures. They may thus be significant in offsetting a decline in private investment, and they certainly constitute a larger base for possible government action to combat depression than do comparable federal expenditures (obviously, civil rather than defense expenditures best lend themselves to this purpose).<sup>1</sup> I do not intend to suggest that state-local governments are well suited and likely to engage in such countercyclical action. But if the answer is in the negative it is likely to be for reasons other than their aggregative importance relative to the rest of the economy.

In his discussion of various types of budgetary adjustment to a decline in economic activity, Heer states that an expenditure cut

<sup>&</sup>lt;sup>1</sup> The President's Economic Report indeed indicates as much in stating that "if it should become necessary, outlays for federal public works could be stepped up by one-half or more within a year. State and local outlays, which are now the highest on record, might be expanded to a similar extent if financial arrangements were adequate." Economic Report of the President, January 1954, p. 103.

balanced by an equivalent tax cut "will be neutral" in its effect on aggregate demand, and he similarly concludes that when coupled with an expenditure increase "the effect of a tax increase on aggregate demand is apparently neutral." He then goes on to discuss the case in which tax rates would be raised in order to "offset a recession-induced decline in revenue and to maintain rates of expenditure at their former levels." For this third-and I think very relevant-case Heer believes the effect on aggregate demand "is definitely adverse." If, as Heer says, a balanced tax and expenditure cut has a neutral effect, why should the maintenance of a given level of tax collections and expenditures have an adverse effect? My reaction to these three cases is that, from a purely analytical point of view, only situations in which expenditures for current output and taxes are maintained can be considered neutral. The balanced increase may be considered expansionary, the balanced decrease contradictory.

Part of the difficulty of Heer's position appears to be due to his failure to distinguish clearly between tax rates and tax collections. This becomes particularly noticeable in his discussion of stabilization reserves. Here it is stated that "When reserves are used to fill in the gap resulting from a revenue decline and to maintain expenditures at current levels without increasing tax rates, the effect on aggregate demand is neutral." It is true that tax rates in this model remain the same, but tax collections obviously do not. Hence filling the gap by means of a stabilization reserve fund leads to the same approximate result as an automatically induced deficit and should be considered as expansionary in its effect on aggregate demand. However, in his discussion of expansion of borrowing Heer again concludes that "When a government increases its borrowings in order to maintain its current rate of expenditure without raising its taxes, the effect on aggregate demand is neutral." In the discussion on additional federal aid the interpretation of the effects on aggregate demand is in several similar cases at variance with that indicated above.

Heer also deals with the question of the extent to which borrowing may be used as a means of state-local recession adjustment. He says that in times of tight budgets it is advisable to channel current revenues into operating funds and to restrict borrowing to durable capital facilities. As a general, long-run maxim this may be a good rule to guide policy. But when the kinds of recession situations that may develop in the state-local area are considered it seems to me unnecessarily stringent. It is entirely possible that

because of the rise in recession-type expenditures to be made out of state-local general funds, outlays for current needs will largely replace expenditures for capital improvements. Capital outlays may, and probably will, continue to be made by user-financed special purpose funds and authorities whose revenues usually are cyclically stable and whose reserves often are large. It is the expenditures dependent on general fund revenues, such as sales, excise, income, and property taxes, that are exposed to the greatest amount of instability. Usually these expenditures are for administrative, welfare, and school purposes. Heer states that "Borrowing to defray current operating expenses and current charges is undesirable under any circumstances, since it means that future taxpayers will be saddled with debt service charges for which they will receive no compensating benefits." It is my impression that he is here emphasizing a general principle of private and governmental finance under ordinary circumstances. I would prefer to ask: How much of state-local expenditures can, if necessary, be temporarily financed through borrowing and paid off in later years of prosperity? This is in effect a stabilization reserve plan in reverse. The objection that future taxpayers would be saddled with charges for which they receive no compensating benefits may also be made against a reserve fund, only again in reverse.

On the factual level, I fully share Heer's skepticism as to the size of available reserve funds and the probable need to rely heavily on borrowing to close revenue-expenditure gaps. As he indicated, the census statistics on cash and security holdings of state-local governments are difficult to evaluate without information as to what type of funds hold them and how much of the holdings constitute unspent proceeds of recent bond issues and minimum working balances. My own scant information suggests that bona fide reserves, which are available for stabilization purposes, are considerably smaller in amount than the census figure of \$15.5 billion of cash and security holdings (excluding offsets to long-term debt and trust funds). For instance, reserves currently available for New York City's executive budget amount to a mere \$32 million.<sup>2</sup> The census reports New York City's liquid assets as \$288 million. It seems doubtful that the difference can be accounted for by semiautonomous bodies and special purpose units whose budgets are outside the Mayor's. A quick glance at the figures for some state

<sup>&</sup>lt;sup>2</sup> Strictly speaking, New York City, like many other cities, is at present not permitted by state law to build up any general fund reserves against depression contingencies.

executive budgets, such as those of New York, New Jersey, and Wisconsin, also indicates that reserve funds are considerably lower than what might be inferred from liquid assets figures. These budgets indicate that reserve funds, on the average, amount to 12 per cent of general fund revenues. This admittedly crude evidence leads me to suggest that an estimate of about \$3 billion for all statelocal reserve funds would be more accurate than the liquid assets figure of \$15.5 billion.

This would indeed still constitute a sizable amount of reserves, and its significance is marred only by the fact that an aggregate for state-local governments cannot be interpreted in the same fashion as if it stood for a single governmental unit such as the federal government. The probability that these reserves are unevenly distributed means that some governmental units will have more than the amount of reserves required to fill a prospective expenditurerevenue gap whereas others may have practically none. In consequence these reserves are not strictly additive.

I agree with Heer's analysis of the states' and localities' aggregate borrowing power, and conclude from it that the outlook here is much more sanguine than in the case of reserves. It is generally held that states and localities could sell several billion dollars' worth of additional bonds without appreciably affecting the yield rates on such issues. This expectation is based on the following facts: (1) present interest costs are still low, on the basis of historical comparison, relative to revenues of state-local governments and relative to national income; (2) state and local governments hold billions of dollars' worth of federal securities in various trust accounts which could be exchanged for their own securities; and (3) the bonds of most states are rated Aaa or Aa by Moody's Manual of Investments. Serious obstacles to a prompt expansion of debt on a large scale, as has been pointed out, exist primarily on the supply rather than the demand side. Constitutional prohibitions and limitations as well as requirements for time-consuming referenda may force some projects to be postponed by time periods ranging from several months to a few years.

This delay in the issuance of new debt is not as serious as it appears at first sight. The major tax revenue of local governments, the property tax,<sup>3</sup> is relatively stable over cycles and experience has

<sup>&</sup>lt;sup>3</sup> Comprehensive data on the tax revenues of state and local governments in eleven eastern and middle western states show that of the total of such revenue the amount derived from property taxes varies from 43 per cent in Michigan (fiscal 1952) to 67 per cent in New Jersey (fiscal 1949).

shown that collections from this source decline with a time lag of one and sometimes even two years, so that tax revenues may hold up fairly well until proceeds from new debt issues become available. The problem is a little more serious for the general funds of state governments, whose major revenue sources are frequently sales and income taxes, which are relatively sensitive to cycles. Much of the difficulty that state budgets face in recession is caused by the segregation of major operating funds and the earmarking of revenues. Some state activities are thereby well insulated against economic adversity whereas others bear the full brunt of it. The fact that the total of state and local tax revenues is not very cycle-sensitive loses thereby much of its value, if it has any.

As Heer points out, highway revenues, the most important stable element among state taxes, are almost universally segregated. He suggests that consideration be given to shifting temporarily a portion of highway revenues to the support of current government services (as was indeed the practice in the thirties before earmarking became a common device). Heer seems to hold that the federal Hayden-Cartwright Act of 1934 against the diversion of highway revenues might be an obstacle here. Yet the Hayden-Cartwright Act has not been a significant cause of the present state of affairs. The main difficulty lies at the state level, where there has been a lack of budgetary comprehensiveness. The chopping up of budgets prevents flexibility in budget making and tends to destabilize what might otherwise be a stable budget.4 The states have revenues which are relatively insensitive to business fluctuations when viewed in the aggregate. There will of course still be some falling off of revenues with a decline in income, but an equally troublesome source of budgetary instability is the effort, primarily self-imposed, to circumscribe the free use of available funds and borrowing power by various legal prohibitions.<sup>5</sup>

The usual justification for stable revenues at the state-local level is the stabilization of expenditures which might otherwise have to

<sup>4</sup> This should not be construed as an argument against highway construction and maintenance in times of depression. On the contrary, little would be gained if by filling in one gap we merely created a new one. The great need for additional modern roads which is at present perceived throughout the nation constitutes a convenient antidepression weapon. The above argument does not concern highways as such but rather is aimed at budgetary rigidity. <sup>5</sup> Replies to a questionnaire circulated by the Council of State Governments

<sup>5</sup> Replies to a questionnaire circulated by the Council of State Governments in 1948 showed that of the twenty-six state governments which stated their answer in quantitative form, sixteen, or almost two-thirds, found that over one-half of their revenue was earmarked. However, the two most important states—New York and California—are not included in this sample.

be reduced. If the stabilization of expenditures is prevented by devices such as the segregation of revenues into earmarked funds, one more justification for the type of revenue structure that states and localities now have becomes greatly weakened.

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Federal expenditure and revenue reactions automatically induced by a decline in aggregate income are usually considered a first line of defense against economic recession. The task of quantitative analysis, then, is to evaluate the stabilizing contributions of these reactions—applying the concept of built-in flexibility. It can be assumed that the federal government would hardly dare cut its autonomous expenditures—at least not in *deliberate* response to the forces of deflation. And since it would likewise not raise tax rates, built-in flexibility can be counted on as a minimal contribution to stability.

Why not a similar approach to state and local finance-that is, initial concentration on built-in flexibility before use of other policies? If all state and local governments followed a coordinated policy-with direction as well as assistance from the federal government-it might be possible for them to assume a share of the responsibility for controlling fluctuations. But most state or local governments are obliged to act more or less autonomously with limited financial resources and in the economic interest of the area they serve. Under these circumstances it is impossible for them to contribute much to the control of economic fluctuations. Rather it is their responsibility to seek an optimal adaptation to the fluctuations that occur. Any contribution they may make to economic stabilization must emerge more or less as a by-product of policies adopted to minimize the disturbing effects of fluctuations and to leave the governmental units as free as possible to pursue their appropriate welfare objectives.

Fluctuations ordinarily cause state and local governments to modify or cut back programs that it would be desirable to carry out. As Heer suggests, these changes must be assessed on the basis of what they mean for the standard of services rendered to the communities. The criterion for a successful adaptation of expenditures to economic fluctuations should be expressed in terms of maintaining some designated (quite possibly secularly rising) standard of

 ${\bf I}$  wish to acknowledge the participation of Anne White in the preparation of these comments.

"real" per capita services. The actual dollar outlays involved in maintaining such standards would then automatically vary at least with population and prices. Further, as I construe maintaining standards, outlays would also vary inversely with the level of unemployment through the impact of the latter on public assistance; for it is part of the job of maintaining standards to carry through on a commitment to provide a given "real" amount of general relief to all persons who qualify on the basis of eligibility rules unchanged from those prevailing in a prosperity period.

On the revenue side a successful adaptation would make it unnecessary for the governmental unit to tinker with the rate structure as a reaction to fluctuations—permitting constant tax rates during depression and a minimum of rate increases during inflation. If initially rates are high enough and the tax structure sufficiently sensitive to income changes, expenditures for maintaining standards can be balanced over a whole cycle through a system of multiyear carryback or carryforward of revenue surpluses from the prosperity period. This mode of adjustment meets and goes beyond Heer's stricture that expenditure reduction without offsetting tax reduction should be avoided if possible.

A maintenance-of-standards policy, then, would produce an automatic decline in revenues at constant tax rates and a semiautomatic expansion of expenditures as the minimal response to depression. A degree of built-in flexibility would thus be provided at the state and local level.

A maintenance-of-standards policy also can serve a more fundamental diagnostic purpose. To get some idea of the magnitude of the problem to which adjustment must be made-that is, to isolate the effects of fluctuations themselves from the effects of any shortrun policy adjustments to them-it is necessary to work with an expenditure and revenue policy that can remain invariant with respect to economic fluctuations and that can be readily translated into quantitative terms. The obvious solution on the revenue side is an unchanged tax rate. A maintenance-of-standards budget is a possible solution on the expenditure side-with the budget assumed here calling for a constant rather than a rising standard of services. The two devices together would make it possible to estimate an expenditure-revenue gap associated with any assumed decline in employment and corresponding fall in gross national product. They thus provide a useful tool for measuring both the problem that confronts the state and local governments and their possible minimal contribution to economic stability.

A rough indication of the over-all expenditure-revenue gap that a maintenance-of-standards policy would produce in a forthcoming period of economic depression can be obtained by means of projections based on state and local expenditure and revenue data for recent years. As a supplement to Heer's paper, I want to present some figures using this type of analysis. The purpose of these estimates is twofold, as already suggested: to obtain some measure of the magnitude of the problem of adjustment that state and local governments may have to face, and to develop a measure of a possible minimum automatic contribution to economic stabilization.

The size of the expenditure-revenue gap will depend, of course, on the severity of the depression; and the financial problem the gap presents to state and local governments will be influenced by the amount of federal aid that becomes available. Recurrence of a gap with anything like the catastrophic proportions of 1929-1933 can probably be ruled out of consideration. Or, to put it another way, any such eventuality may be clearly regarded as a failure of federal policy, justifying emergency measures, and need not be taken into account by state and local government in planning their finances. On the other hand, even a successful federal policy for controlling fluctuations cannot be taken to imply continously full employment at stable prices, and hence state and local governments must count on a significant degree of fluctuation both upward and downward. The current concern about state and local autonomy or independence implies interest in the extent to which state and local governments can make their way in a moderately fluctuating economy with no expansion of federal aid beyond that already built into the structure of federal-state-local fiscal relations.

Needless to say, no great refinement of estimation underlies the derivation of these expenditure-revenue figures; they represent a quick adjustment to extend figures worked out in detail for large cities to cover all state and local governments.<sup>1</sup> The procedure was this: A simplified cycle model indicating hypothetical fluctuations in gross national product in terms of annual figures was constructed. The model allows for three years of less than full employment with unemployment in the lowest year averaging 8 million, or 12 per cent of the labor force. This results from an assumed man-hour loss equal to 15 per cent of available man-hours—that is, 15 per cent of the product of the civilian labor force and the standard workweek—accounted for in part by an assumed shift to shorter

<sup>1</sup> Cf. Melvin and Anne White, "Impact of Economic Fluctuations on Municipal Finance," National Tax Journal, March 1954, p. 17.

hours for those remaining employed. This probably represents about the limit of severity which state and local governments can be expected to plan for. In a depression more serious than this, the state and local problem and its contribution to economic stabilization would probably be swamped in the national emergency. Fairly stable prices were assumed, with a maximum decline of 5 per cent. Combined with other assumptions, this implied a peak-year-totrough-year decline of about 10 per cent in gross national product.

In this model, increase on the expenditure side reflects changes in the cost of continuing a standard of services established during the last pre-depression year, which is taken to be 1953. Calculations were made on the basis of the per capita standard of service provided in 1953 at an estimated cost of \$29 billion. On this basis, expenditures for maintenance of standards rise through the depression period, reaching \$30.5 billion at the trough—about two years after the onset of the depression—or  $11/_{2}$  billion above the initial year expenditures. Expenditures then maintain a fairly even level for the subsequent recovery year, when the reduction in public assistance outlays due to rising employment is just about offset by the increase in requirements due to rising prices and growing population.<sup>2</sup>

<sup>2</sup> Estimates of expenditures—and revenues—for 1953 were obtained by adjusting available 1952 data given in the Bureau of the Census's Summary of Governmental Finances in 1952 according to the government-purchase-of-goods-andservices component of the national income accounts. The 1953 expenditure total excludes expenditures out of unemployment compensation and other trust funds but includes contributions of state and local governments to their employee retirement funds, which constitute a charge on the budget. Also excluded is a portion of the actual capital outlay figure. This exclusion is inplied by the decision to measure the impact of depression on the cost of maintaining standards of per capita services at the pre-depression (1953) level, rather than on the cost of a secularly rising standard. Insofar as services derived from capital assets are concerned, constant standards are assumed to require a constant ratio of real assets to population. On the basis of the only data readily available on capital assets of state and local governments, a reasonable allowance for depreciation and population growth during 1953 yields a capital outlay requirement of \$4.5 billion. The estimated excess of outlays in 1953 over this figure—which comes to almost \$3½ billion—is taken to indicate net expansion of capital in relation to population, if projected throughout the depression it would imply a continuously rising ratio of assets to population, and therefore for purposes of estimating constant standards it is subtracted from the base figure for capital outlays.

The rise in general relief case loads is the most important factor contributing to the increase in expenditures. There are no data available to measure how many cases would be added to welfare budgets in a future depression as severe as that assumed here, since welfare standards have changed greatly. The rise in case loads underlying the rise in welfare expenditure is derived by linear projection of a correlation between case loads and unemployment for recent years, allowing in one-half the cases for a six months' time lag between the increases in In 1953, revenues from state and local governments' own sources (excluding revenues of insurance trust funds) are estimated to have been enough to cover the expenditures of \$29 billion included in the maintenance-of-standards budget. The decline in tax revenues induced by the drop in gross national product hypothesized in the model is calculated on the basis of an estimated income elasticity for the state and local revenue structure of .5. Between the peak year and the trough year the decline amounts to about \$1.3 billion. It is slightly offset by an increase in federal aid to state and local governments. On the assumption that legislation governing these programs in 1952 is continued unchanged throughout the cycle, the increase in federal aid is about \$2.2 billion and thus the net decline in revenue is about \$1 billion.<sup>8</sup>

unemployment and the associated increase in case loads. The public welfare case loads in the categories of old age assistance and assistance to the blind and disabled are assumed to rise with population growth during the depression years, but the rise in aid to dependent children is assumed to be predominantly a cyclical reaction. The increase in the final public welfare figure reflects the above factors offset to some extent by the hypothesized decline in prices, which reduces the dollar requirement per case load grant.

Expenditure categories in which payrolls absorb a high proportion of outlays, such as education and police and fire protection, also rise. This rise reflects the increase in personnel required to maintain standards for a growing population, and the assumption that state and local governments will maintain constant wage rates during the depression—neither cutting them nor providing usual "productivity" increases. Categories in which materials purchased are important such as health, sanitation, and highway maintenance—as well as capital outlays, do decline somewhat as a result of the assumed general decline in prices. The behavior of interest charges depends on the financial policies pursued. But even if the entire expenditure-revenue gap is financed by borrowing, the impact on interest charges is still slight.

<sup>3</sup> The elasticity coefficient of .5 is an average of individual elasticities weighted by the amounts collected under the respective taxes in the base year. It is assumed for these calculations that this elasticity remains stable over the whole period. Actually the coefficient would vary somewhat with changes in the level of income as taxes with high individual elasticities shifted in relative importance compared with taxes of low elasticity. However, for the present model the variation in the over-all coefficient would not be great.

It may be noted that for a period as long as that covered by the model, there may be some distinction between the cyclical and secular responsiveness of tax yields to income changes. Such a distinction is probably of significance only in estimating the elasticity of the property tax. Measurement of elasticity is also complicated by the problem of time lags. No attempt has been made here to deal with these complexities, and the elasticities for the individual revenue sources are based on the findings of H. M. Groves and C. H. Kahn as given in "The Stability of State and Local Tax Yields" (*American Economic Review*, March 1952), and on certain theoretical considerations.

Federal aid for nonwelfare purposes is simply assumed to rise proportionately with population. On the basis of existing legislation, federal aid for welfare assistance could be expected to rise proportionately with the number of recipients, assuming the dollar grant per case remained constant. The fact that the dollar

For the trough year, then, expenditures are about  $1\frac{1}{2}$  billion higher and revenues \$1 billion lower than they were in the predepression year, when revenues just balanced the maintenance-ofstandards budget. The total gap, excluding the operations of trust funds, is  $2\frac{1}{2}$  billion for the trough year. The model allows for three years of less than full employment, and the total depression period gap comes to just about \$5 billion.

It should be noted that not all of this \$5 billion depression gap is the result of reactions that can be properly included in the concept of built-in flexibility. Built-in flexibility refers to changes in revenues and outlays contingent on changes in gross national product and other income aggregates; specifically it does not refer to expansion in expenditures as a result of population growth. Consequently the built-in flexibility gap would be somewhat less than \$5 billion. It would reflect only the cyclical expansion in welfare case loads and the net decline of revenues, offset by the price level decline affecting all categories of expenditures.

Two questions can be raised about this gap: One, are the state and local governments able to finance a \$5 billion gap either out of reserves or by borrowing? Second, assuming that all states and localities pursue such policies, will their outlays help to stabilize aggregate demand?

To turn first to the financing of the gap. According to the Bureau of the Census's Summary of Government Finances, state and local governments in 1952 held \$15 billion in cash and securities, for which no specific allocation is indicated. Unfortunately I have nothing to add to Heer's information on the extent to which these liquid holdings are subject to commitments or minimum working balances and thereby are restricted from use as a free reserve fund. But even if something of the order of \$5 billion could be made available to finance the expenditure-revenue gap, there is no reason to suppose that the distribution among states and localities of this total would parallel the distribution of the total expenditure-revenue gap.

If reserves are not available, the alternative is borrowing. Heer has made it clear that state and local governments have a large

grant per case is assumed to decline, reflecting the fall in consumer prices, might imply that federal aid would rise slightly more than in proportion to state and local expenditures (due to the provision for reducing the proportion paid by the federal government when the payment per case rises above a certain sum). However, the price factor in this instance is very small and has been ignored, and federal aid for assistance is assumed to maintain a constant ratio to state and local expenditures for welfare assistance programs.

and unused borrowing capacity and that the numerous institutional difficulties in the way of expanding debt in depression are probably not insurmountable. I differ with him, however, on his apparent restriction of borrowing to capital outlays. It seems to me that financing current expenses by a program of short-term borrowing repaid in a subsequent period of prosperity amounts to essentially the same thing as financing out of reserves accumulated in previous prosperity periods—one is a carryback of surplus, the other a carryforward, and neither requires any permanent increase in debt. As a matter of fact, the practical difficulties in the way of administering and maintaining the integrity of a reserve fund program seem to me more impressive than those raised by a program of depression short-term borrowing. And insofar as ultimate cost to the taxpayer is concerned, borrowing is no more expensive than reserve fund accumulation.

The question of depression financing makes clear the importance of considering what comes after the depression is over. Financial difficulties do not necessarily terminate with the return of full employment. Assuming that the hypothesized three-year depression were followed by a steady business expansion at stable prices, figures based on my illustrative model indicate that revenues from a tax structure with an elasticity of .5 (plus federal aid) would not quite keep pace with expenditures for maintaining standards. Thus tax rates would have to be raised to produce the surplus necessary to replace the drain on reserves or to repay the depression period addition to debt. If a price inflation were assumed, the costs of maintaining standards would rise even more rapidly, and the cumulative deficit over the whole cycle might become very large. Thus the present financial structure, with constant tax rates, would not raise adequate funds over the cycle as a whole. The problem would be more acute for localities-as indeed it was during the postwar inflation-than for the states, which tend to have more elastic tax structures.

It is probably worth giving special notice at this point to the cyclical pattern of expenditures that is implied here, particularly when depression is followed by some price inflation. After adjustment for the long-term upward trend, expenditures vary essentially with prices and unemployment. Wages and prices tend to be more sensitive to upward than to downward pressures; thus price level declines are not much of an offset to the effects of rising unemployment. On the other hand, price rises as unemployment tapers off help to produce further expansion of expenditures—especially if an inflationary upswing develops. Thus expenditures tend to rise during both depression and full employment, reaching a minimum point somewhere in the period of recovery.

I have some reservations about Heer's analysis of the demand effects of expenditure and revenue movements generally-particularly his discussion of stabilization reserves and incentive tax reduction. Apparently he considers that if state and local expenditures remain constant and the structure of tax rates is unchanged, state and local finance will be neutral in its effects on aggregate demand. One aspect of this problem is covered in the discussion of David Lusher's paper in this volume: the need to specify a bench-mark by which to measure the impact of automatically induced changes in revenues (or expenditures) on aggregate income, and the correlative problem of what constitutes a good bench-mark. I do not believe that Heer's bench-mark, if I have interpreted it correctly, of constant rates and constant dollar expenditures is the most useful one. It tends to conceal the significance of induced movements on the tax side, which implies an asymmetric treatment compared with the expenditures side.

I would suggest a bench-mark policy of constant expenditures and constant tax collections. Such a bench-mark is oriented to the question: How much more or less are state and local governments contributing (in absolute terms) to aggregate demand than they were in the last pre-recession year? Then, however the contribution in the pre-recession year is itself evaluated, a depression-induced expenditure-revenue gap becomes an incremental contribution.

Quantitative assessment of the impact of the expenditure-revenue gap as developed here requires the usual assumptions about the spending functions involved in national income models with perhaps specific attention to the spending propensities of the recipients of welfare payments and the beneficiaries of tax reduction, taking into account the offsetting effect of state and local tax reduction on the federal income tax base. Liquidity implications and non-induced investment effects can certainly be ignored. A thoroughgoing analysis would take into account the time lags involved in the income-spending-income sequence.

The results of such an analysis can be expressed following Lusher and Musgrave-Miller in terms of the decline in gross national product (assuming a given decline in autonomous expenditures) that would be forestalled by state and local outlays to cover the expenditure-revenue gap. But a budgetary policy that would eliminate the expenditure-revenue gap also implies a somewhat different

functional relation between changes in national product and changes in consumption; thus it becomes quite difficult to estimate how much decline in gross national product would be forestalled by a policy which permits, as compared with one which does not permit, the gap to develop.

Therefore I prefer to express what a maintenance-of-standards policy would contribute in somewhat different terms—in terms of the incremental decline it would permit in autonomous expenditures, give a pattern of decline in gross national product of a maximum of, say, 10 per cent. That is, an incremental expenditure-revenue gap of \$5 billion by states and localities would permit autonomous expenditures to drop \$4 billion farther than otherwise (this decline might be about 10 per cent of a depression period level of gross private domestic investment) without producing a decline in gross national product of more than the original 10 per cent. In general, in appraising potential contribution to stabilization it seems to me better to relate changes in state and local expenditures and revenues to gross private domestic investment rather than, as Heer does, to gross national product. In any event, if the relationship is to be to gross national product, the multiplier cannot be left out.