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Public Policy and the Urban Fiscal Problem:
Piecemeal vs. Aggregate Solutions†

By ROY W. BAHL*

Introduction

A NECESSARY FIRST STEP toward re-
solving the financial crisis facing
American cities is a proper definition of
the urban fiscal problem, i.e., a separa-
tion of the fiscal problems of metropol-
itan areas from those which exist by
virtue of metropolitanism. Consider this
dissection: We are impelled to separate
immediately the Galbraith problem —
that of underinvestment in the public
sector — as a general ill of society and
not necessarily a result of any partic-
ular governmental form.¹ Then the ur-
ban fiscal problem must relate to the
compounding of this general social im-
balance by metropolitanism, i.e., by the
fragmentation of local government and
by the spatial clustering of both ends of
the income distribution within the Stan-
ard Metropolitan Area, hereinafter re-
ferred to as SMSA. Most recently the
effects of this compounding are re-
ferred to as metropolitan disparities, the
focus being on the complex set of inter-
relationships between cities and sub-
urbs, and among suburbs of different
types.² But while valuable in that they
point out the present state of urban-
suburban public finance differences,
these studies are primarily (and admit-
tedly) concerned largely with symptoms,
i.e., with the consequences of fiscal im-
balance in the metropolitan region. The
basic problem remains to be concep-
tualized.

Because the statement of the urban
fiscal problem is typically made in terms
of ex-post, city-suburb differences, it is
not unexpected that discussion of remed-
dial public finance policy is cast in terms
of effectiveness in reducing these dif-
f erences. Nor is it surprising that much
public policy is suggested as corrective
action for particular imbalances. Hence,
suggested disparity-reducing programs
are almost as numerous as the specific
disparities they are designed to correct.
In short, the problem solving approach
is piecemeal.

The basic objective of this paper is to
explore the implications of piecemeal
versus aggregative approaches to resolv-
ing the fiscal ills of metropolitan regions.
Since a necessary prerequisite to discus-
sion of any urban public policy is a
systematic definition of the disparities
problem, the following section is given
over to developing the rudiments of a
theory of metropolitan fiscal imbalance.
This conceptual framework is then used
(a) to evaluate, in general terms, that
current governmental policy which is

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but the analysis and conclusions remain the author’s.

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¹ John Kenneth Galbraith, The Affluent Society
(Boston, Massachusetts: Houghton Mifflin, 1957).

² For example see, Alan Campbell and Seymour Sacks,
Metropolitan America: Fiscal Patterns and Government
Systems (Glencoe: The Free Press, 1967); and Advisory
Commission on Intergovernmental Relations, Fiscal
Balance in the American Federal System (Washington,
geared to alleviate the fiscal plight of central cities, and (b) to examine the grounds (equity and efficiency) on which such a concoction of isolated corrective devices might be preferable to an aggregative approach.

The Disparities Problem

Definition. The problem of metropolitan fiscal disparities grows out of income segregation in the urban community. Specifically, fiscal disparities result because the tax base (resources) in the community is divorced from the needs of the community (requirements), a phenomenon made possible by governmental fragmentation. But the point often missed in examining the linkage between balkanization and urban fiscal problems is the part of the problem which is uniquely metropolitan. That is, the existence of intercommunity (intrametropolitan) variations in the size of the resources-requirements gap is the manifestation of that part of the problem which results from metropolitanism. This is to be contrasted with the problems which multiply increasingly with urbanism per se (e.g., transportation, air pollution, physical deterioration) since these may exist independent of the structure of local government. A simple model may be used to describe these two dimensions of the urban fiscal problem more clearly. Let

\[ R_i = \text{Tax revenues of the } i^{th} \text{ community} \]
\[ N_i = \text{public service requirements of the } i^{th} \text{ community} \]
\[ Y_i = \text{personal income of the } i^{th} \text{ community} \]
\[ K = \text{number of communities in the metropolitan area} \]

Then the fiscal disparity \( d_i \) for any given community is defined as

\[ d_i = R_i - N_i \quad (1) \]

given that

\[ \frac{R_1}{Y_1} = \frac{R_2}{Y_2} = \ldots = \frac{R_k}{Y_k} \quad (2) \]

Equation (2) imposes the condition that fiscal effort exerted in each community of the metropolitan area is the same. Then if \( \sigma^2 > 0 \) a fiscal disparities problem exists where

\[ \sigma^2 = \frac{\sum_{i=1}^{k} (R_i - N_i)^2}{K} \quad (3) \]

The only case in which no disparities problem exists is if \( d_1 = d_2 = \ldots = d_k \), i.e., if \( \sigma^2 = 0 \). This simple conceptual framework may be used to explain the separation of metropolitan fiscal problems from fiscal problems which exist because of metropolitanism. If given equal fiscal effort as in (2) above,

\[ \sum_{i=1}^{k} d_i = 0 \text{ but } \sigma^2 \neq 0, \] positive disparities in some communities are just adequate to compensate communities with negative disparities. Then, in the metropolitan area total resources are adequate to compensate requirements and the variance among communities in the quality of public services is due solely to the governmental structure which permits a separation of public sector requirements from tax base. Alternatively, if \( \sigma^2 \neq 0 \) and \( \Sigma d_i < 0 \), the metropolitan area is twice-damned in that not only do intergovernment variations in resources-requirement balance exist, but the total fiscal resources of the SMSA are not adequate to meet public needs. Then after “gainer” governments compensate “losers,” the remaining amount of negative disparity defines the fiscal deficit which
may not be attributed to balkanization. This, in fact, defines the larger problem of underinvestment in the public sector.\(^3\)

The Exploitation Argument. It now remains to examine the reasons why requirements and resources may not balance in individual communities in the metropolitan area. There are at least three. First, because the central city is the home of a large fraction of the area's low income population, it faces the dilemma of servicing a high-cost population with a generally inadequate and declining level of resources. Second, suburban residents impose public service requirements on the central city government via trips by suburbanites into the central city to work, to shop, or for entertainment. To the extent the city is not compensated adequately by nonresident users, the gap between resources and requirements grows even wider. The third is a more subtle dimension of the “suburban-exploitation-of-the-core-city” argument, which grows out of the relatively greater freedom of suburban residents to reveal a preference for public services. For example, the suburbanite may be able to exert some control on the expanse of public programs — sidewalks, streetlights, mosquito control, police protection, parks, snow and ice removal — while the core city dweller (since the city must serve the needs of a large commuter population) necessarily has much less to say about the size or composition of his public package. Moreover, it is entirely likely that the level and composition of city services will be determined to some extent by suburban residents. The reverse situation is much less probable. This relatively greater suburban freedom of public goods choice is in fact possible only because there exists fragmented metropolitan government, i.e., only because there exists a core city or low income suburb in which to locate ball parks, freeway interchanges, and minorities. Then this nonreciprocal, suburb-on-city influence on public service levels, together with the relatively greater public goods choice of suburbanites, tends to widen the resources-requirements gap in core cities and to reduce it in suburbs. These factors form a base from which the urban-suburban exploitation argument might be fully developed.

Alternative Solutions

The fiscal trouble of central cities is the subject of much more than academic concern. Any number of schemes have been implemented to revive the financial position of the central city, but these attempts have been largely uncoordinated and their net effect on the direction of fiscal disparities is not at all certain. The objective of this section is to examine these varied schemes in the hopes of making some judgment about their over-all effect on fiscal disparities. One might structure an evaluation of the piecemeal approach to reducing disparities around the six most often discussed remedial policies: (a) the increased utilization of local taxing powers, (b) the direction of federal policy toward a renewal of the core city, (c) the direction of state government fiscal activity toward a balancing of needs and requirements within SMSAs, (d) the creation of metropolitan government, areawide provisions of public ser-

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\(^3\) This is not exactly true if public facility needs increase at an increasing rate with increments in poverty population, though agglomerative effects could be accounted for with some adjustment to the simple model presented here.
vices, or some other form of geographic political expansion capable of internalizing externalities, and (e) policies directed at controlling or at least influencing the physical development of the city and/or certain of its public finance characteristics.

Increased Local Government Revenues. One possibility for capturing the cost of nonresident use of core city services is to levy a user charge for public services. But for the most part it is not possible to assess a specific user charge for the service, e.g., what is a unit of police protection? Nonetheless, realizing that benefits from some core city provided services do in fact leak uncompensated out of the community, city financial planners have installed occupational and retail sales taxes. These taxes are levied at the point of economic activity rather than at the place of residence.

The local occupational or earnings tax is usually levied as a flat rate at the place of employment. If one assumes value-added to be an appropriate measure of benefits received from city services, the payroll tax base would seem appropriate on equity grounds. But to arrive at a proper rate implies some estimate of the per resident cost of the specific services to be supported from this tax, and this has not even been attempted. Indeed, where total receipts are bound for the general fund, such an estimate would not seem possible. More probably the rate is dictated by yield considerations alone — how much is to be raised from the new tax. Then if an earnings tax were to extract from suburban residents an amount equal to the value of the central city services which they consume, it would be merely a coincidence. Much of the same criticism may be leveled at local consumer sales taxes. The base would seem to imply that benefits received from a shopping trip are proportional to the dollar volume of consumption expenditures, a highly questionable assumption. As in the case of the local occupational levy, it does not seem probable that the choice of a rate is dictated by nonresident service cost estimates. More likely is the possibility that the rate is chosen only on a basis of yield considerations.

In general, then, taxes designed to bring a proportion of the suburban population within the core city fiscal base do not have rate structures which are compatible with the objective of extracting a payment from the nonresident which is exactly equivalent to benefits received. Whether nonresidents over or undercompensate the core city for services rendered may not be determined. In defense of the autonomous local levy, some governmental income redistribution does occur. Perhaps rough justice is all that may be expected in public finance.

Consider now the possible resource allocation effects of these local revenue measures. For example, assume that the amount of police services furnished, relative to other public services, is some function of the relative cost of these public services, the latter measured in per city resident terms. If in the subsequent time period there is increased suburban commuting into the core city such that the cost per city resident for police services rises relative to all other public goods, and such that local government income redistribution does occur. Perhaps rough justice is all that may be expected in public finance.

4 Though in at least one state receipts are shared equally between the city of employment and the city of residence.
5 The example of police versus all other public goods is taken here to represent the more general dichotomy between public goods on which nonresidents draw heavily and those on which they do not.
ernment decision makers realize that benefits from police services are being increasingly exported, the result will be a decline in police services relative to other public goods. Since local residents' preference for police relative to other public services has not necessarily changed, the urban-suburban interaction has caused a misallocation of resources. Then, even if there is compensation in the form of sales or income taxes, only an income effect will be exerted. If compensation is more than adequate, an over-all higher level of public services will result, but the city will be underspending on police vis-à-vis other public programs. Only if it were possible to extract the appropriate charge from each nonresident user of public services, and if public decision makers viewed these services as being saleable on a unit basis, and if there were excess capacity for each service in question — would a user charge system be distributionally neutral and have no effect on the allocation process.

Federal Government Policy. If the tendency for metropolitan population growth and decentralization to be accompanied by pronounced spatial income fragmentation could be reversed, governmental fiscal imbalances would be less severe and large central cities might avoid the process of cumulative decay. This kind of policy, aimed at eliminating or at least alleviating the conditions basically responsible for fiscal imbalances, may be contrasted readily with local revenue measures which are designed to preserve the tax base by expanding the units it covers.

Though there would seem to be little probability of completely reversing the pattern of metropolitan growth, a partial restructuring of the socio-economic dispersion of the SMSA population would seem possible. Proposed federal housing policy would encourage low income families to settle in the urban fringe while some federal redevelopment money has been used to attract higher income residents to the central city. With a current strong movement of industrial plant sites (and thus blue collar jobs) to the suburbs, proposed federal legislation which would subsidize lower income residents purchasing a home would seem particularly well timed. In this view — providing central city residents with a wider choice of type and location of housing — income maintenance programs including rent and mortgage interest subsidies could contribute markedly to the reduction of fiscal imbalances. However, under certain conditions these plans might have the effect of accentuating needs-resources imbalances. If a housing aid program enables qualified Negroes to purchase suburban homes, it will deprive the core city of much of the productive citizenry it has left. Those remaining behind will be of the lowest economic class, now without the opportunity to interact with the higher income of even their own race. The fiscal position of the core city could grow even worse.

Further, history would suggest that the suburban jurisdictions into which the Negro moves may not fare much better. Negro demands for central city housing in the 1950s held home values...
high enough to enable whites to take advantage of the FHA programs and move to the suburbs—a "trickle-up" effect. It is significant to note that the Negro was an active agent in this process. It is conceivable that the proposed, subsidized, Negro demand for suburban housing will again have a "trickle-up" effect—home values will be held sufficiently high to enable white residents of relatively low income suburbs to move even further out to newer and "whiter" communities. Then two consequences may be speculated upon: (1) the desired income and racial desegregation may not result from this federal housing program, and (2) since "central cities" with suburban locations could result, fiscal imbalances could be accentuated rather than reduced.

The potential effects of other federal programs on the problem of metropolitan fiscal disparities varies widely, at least some of these programs being clearly at odds with any objective of diffusing the city's poor throughout the metropolitan area. The model city plan is aimed at rehabilitating rather than eliminating the ghetto neighborhoods, therefore may not eliminate disparities, even in the long run. In fact, metropolitan fiscal imbalances could be increased by virtue of the feature in many model city proposals which calls for an increase in the level of public services provided in ghetto areas. Alternatively, federal urban renewal assistance can work (theoretically) in the direction of reducing city-suburb fiscal imbalances by cutting at both sides of the resources-requirements gap. Replacement of slums with middle-to-high income residential development at once provides the central city with a lower cost citizenry and an expanded fiscal base. Further, renewal of the core also enhances the position of the central city in the competition for new industry.

*State Government Policy.* The two general routes open for state governments to offset urban fiscal disparities are the direct assumption of functions now performed at the local level and the extension and reform of state assistance programs. In either case, intrametropolitan fiscal disparities could be reduced. Campbell describes the first of these possibilities for reducing metropolitan fiscal imbalances.

If welfare in New York State were transferred from the units which presently administer it—New York City and outside of New York City, mostly counties—the disparity in fiscal effort (local taxes as a proportion of income) between New York City and its suburbs would be reduced from the present 28 per cent difference to 11 per cent. In other words, in the case of New York City the result would still leave the city with a higher fiscal effort than its surrounding suburbs, but would reduce the gap considerably—for the country's twenty-two largest metropolitan areas the gap would be decreased from 33 to 18 percent.

Then if services which bear most heavily on cities with heavy concentrations of poverty families were transferred to state government, public service requirements would be reduced relatively more in core cities than in suburbs. In this fashion, fiscal disparities are genuinely reduced, though not eliminated since resources still vary widely because of income fragmentation in the SMSA.

The second route open to the state involves altering aid systems. The problem is not only one of increasing

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aids to local units but of revising existing state programs to correct distribution formulae which have long favored rural and suburban areas at the expense of core cities. If per student education financing needs are higher in the core city than the suburbs because of the particular needs of children from poverty areas, a distribution of state education aids which reflects this difference could move the local fisc a giant step in the direction of balance. Very little has been done along these lines but some examples of at least an understanding of the problem are available. First, the education aid distribution in Connecticut has been amended to reflect need differentials, a revision which should greatly benefit the state's core cities. The second is the state authorization in Jefferson County (Louisville) Kentucky for the levy of a county-wide occupational tax, earmarked for education, with the proceeds to be distributed between the city and county school districts on a basis of average daily attendance. The first of these examples reflects an actual attempt to take account of local differences in per student financial needs while the latter is an example of a state government taking an active role in matching jurisdictional needs with areawide resources.

Another approach which might alleviate metropolitan fiscal disparities involves balancing city and suburban fiscal burden to accomplish a transfer of real income from suburb to core city. In this vein the state might attempt relief of spatial tax regressivity, as opposed to income class tax regressivity, by providing either lower personal tax rates or incremental exemptions for residents of the central city. This approach has been suggested for the taxation of firms on the theory that relief from taxes may provide some incentive for firms to locate and/or expand in the core city.

Areawide Financing or Governmental Reorganization. In the presence of true metropolitan government, fiscal disparities cannot exist, since there can be no divorce of tax base from fiscal needs. But the prospects for wholesale adoption of metro are not great — its leading spokesman sees only a baker's dozen by the year 2000. However, areawide arrangements for public facility financing are becoming increasingly popular in the form of special districts to handle specific problems which cross jurisdictional boundaries, an expanded role for the urban county in serving both incorporated and unincorporated areas, the development of more elaborate programs and institutions for comprehensive regional planning, and the reorganization of voluntary associations of area governments in metropolitan areas. Though these steps do enable elimination of fiscal disparities for the functions concerned, it is interesting to note that the case for consolidation is traditionally made in efficiency rather than governmental equity terms — the existence of economies of scale, spillovers, and "local government proximity" are taken as the major justifications for recommending areawide financing.

This position has led to permissive state

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* If an imbalance between needs and public service levels in certain areas within the SMSA is greater than the imbalance in others, the problem is one of redefining the equity parameter in the metropolitan government's objective function. But this is not the disparity problem since the resource dimension is not relevant.


Ibid., p. 50.

government legislation which enables the provision of certain services on an areawide basis. Almost immediately this legislation was translated into areawide provision of the "hardware" services such as water supply and sewage disposal. But the hardware functions were among the few services where the central city realized a generally higher level of service per unit price than the suburbs. On the whole, a good argument could be made that permissive state legislation has had at best a neutral effect on metropolitan urban-suburban imbalances.

In general, there is little fault to be found with areawide financing schemes as a remedy to the problem of intergovernment, interarea resource-requirement imbalances. By internalizing externalities, allocative efficiency is preserved, and by bringing the function under a single decision making unit a uniform quality of services may be provided with burden differentials dependent only on the taxing device used rather than on the jurisdiction of residence.

Other Policies of Control. There are also general local government control devices which have potentially an important bearing on the disparities problem. The first may be illustrated by a somewhat novel suggestion that the growing intrametropolitan disparity in education services be checked by local action to control the levels of suburban and city teacher salaries. The basis of such a suggestion is that, if core city salaries were maintained at some level above suburban salaries, it would be possible for city systems to bid teachers away from suburban systems. From the point of view of the teacher this would involve a trade-off between working conditions, proximity to home, background of students (all potential advantages of the suburban district) and a higher salary. The size of the salary difference to be maintained could be determined by trial and error, since the locational employment decisions of teachers would reveal their relative evaluation of higher salaries.

Yet a second policy of governmental control, local building and zoning restrictions, has a perverse effect on fiscal balance. The result is to simultaneously facilitate income fragmentation in the SMSA and provide an impediment to redevelopment of the core city. Brazer relates the disparities problem directly to suburban zoning practices which "... through zoning regulations and discriminatory practices in rentals and real estate transactions, contribute directly to the concentration in the central city of socio-economic groups which impose heavy demands upon local government services. ..." Robert Wood, writing on the same subject, argues:

For if the powers of local government are used strategically, the original settlers of a suburban town can refuse to be overwhelmed by the onrush of population from the city. They can, by zoning, residential covenants, selective industrial development, taxation, and informal patterns of segregation, literally choose their own fellow citizens. Because they do not have to reproduce all the parts of a self contained economic system and admit clerks, craftsmen, and laborers within their boundaries, a degree of homogeneity can be achieved. ... The central city becomes a receptacle for all the

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functions the suburb dweller does not care to support.  

If zoning devices are successful in maintaining socio-economic segregation in the suburbs, they are also of some importance in impeding new construction in the central city. Building restrictions do not give the core city a comparative advantage in small scale redevelopment or new development in that they are inevitably more severe at the core than in outlying areas. Local property tax policy may also be at cross purposes with a disparity-reducing restructure of metropolitan populations. Netzer writes that the real fiscal problems connected with city rebuilding programs relate to the choice of fiscal instruments used for financing rather than to the fiscal capacity of the city.  

High central city taxes on business or taxes which discourage rebuilding the core city are in the long run a deterrent to the increases in both economic activity and real property values in the central city. Then, the net effect of zoning, building codes, and local property taxes is probably to increase fiscal disparities. At best these governmental policies provide little inducement for remaining or locating in the core city.

Conclusions: Piecemeal vs. Aggregative Solutions

Ideally, the jumbled set of interrelated effects on fiscal balance of each of these policies would be unwoven and a clear net effect of the aggregate of governmental policy could be identified. But (a) each governmental program has a multiplicity of direct and indirect effects, some of which may not even be measurable, (b) the interdependencies among the governments and among the individuals in the SMSA’s which give rise to the disparities problem are so fantastically complicated that the final impulses of any change in public policy do not seem traceable, and (c) the sheer number of governmental programs and natural growth factors which conceivably could affect the fiscal balance of a metropolitan region is immense, and only with complete enumeration could a net effect be described. These considerations coupled with the discussion in the preceding section would seem to suggest that if the current piecemeal approach did move the metropolitan fisc toward balance, it would not be through design. Moreover, it does not seem that a predictable, coordinated piecemeal approach is even possible since the policy decisions are multigovernmental and decentralized, and the nature of the interdependencies among programs is virtually unknown. There is even some basis for the contention that the piece-meal approach to the financial problems of cities multiplies rather than reduces fiscal imbalances.  

There is some theoretical justification for this argument. Baumol notes “what the second best theorem tells us and emphasizes rightly is that the partial and mechanistic imposition of Pareto optimum conditions is very likely to make things worse.”  

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15 See for example, the metropolitan case studies in *Fiscal Issues in the Future of Federalism*, Supplementary Paper 23 (New York, New York: Committee for Economic Development, 1968) and in *Fiscal Balance . . .*, op. cit.
This critique could also be leveled at a solution which would combine user (commuter) charges, where applicable, with state aids (the latter to eliminate any residual imbalances). Moreover, comparative evaluation of piecemeal and aggregate approaches requires consideration of the costs incurred in making arrangements to insure optimal output.\(^{17}\) It would surely be less expensive to modify state aid systems than to devise and install a system of user charge — commuter taxes.

There are also substantive arguments against the aggregative (state aid) solution — that it has a distortive effect on the allocative decisions of core city governments. Spillouts of benefits by community A, about which residents of A are aware, will lead to an underallocation of resources by A. Even if state aids (spillins) are adequate to eliminate disparities (to make the externalities distributionally neutral), allocative efficiency will suffer. Aid may exert only an income effect on the choice between public and private, and among public goods. For example, Weisbrod's analysis of interstate education expenditure variance indicates that benefit spillouts (measured as population out-migration) have a significant dampening influence on expenditures, given that interstate variations in the relative contributions of federal-state-local governments are held constant.\(^ {18}\) The other major critique of a state solution is political rather than economic in nature. The allocative decisions of state legislatures have in recent years been dominated by the vested interests of the suburbs and, given current population trends, there is little to indicate a natural change in the balance of political power within states. In the absence of some new-found benevolence on the part of suburban legislators, the "pass-through" problem will most certainly have to be solved at the federal level.

On the other hand, an aggregative-state government coordinated approach would seem to afford a greater possibility of achieving intermetropolitan fiscal balance. It is clear at once that an aggregative approach and a multigovernmental decision-making process are not compatible. The strong alternative of the state government's assuming a coordinating role in balancing the SMSA fisc is a seemingly appropriate solution given that growing levels of urbanization are forcing state governments into a greater urban orientation anyway. The state government alone would seem in a position to shape the fiscal balance among local governments in SMSA's. First, it has a broader tax base than any local government. Second, the state could create an aid policy which could reduce resource-requirements gaps and simultaneously equalize tax burdens. Third, the state could control the proliferation of local government within the metropolitan area and thereby reduce the potential for financial imbalance. Fourth, the state can (and already does in many states) administer a planning agency capable of controlling the intergovernmental variance in public service levels. Finally, federal aids could be "passed through" the state level to assure conformity with an over-all plan to maintain some desired financial balance within the urban area.

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