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METROPOLITAN FRAGMENTATION AND DECENTRALIZED CONTROL OF REVENUE RESOURCES

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In his ground-breaking article, Tiebout proposed a novel solution to the free-rider problem. Because public goods are non-excludable, the rational citizen "will understate his preferences and hope to enjoy the goods while avoiding the tax" (Tiebout 1956, p. 417). Tiebout's solution applies to those public goods that are excludable beyond the boundaries of the local jurisdiction, although non-excludable within the jurisdiction. If Ms. Doe has a choice of many jurisdictions in a metropolitan area, she will be forced to reveal her true preferences for the public good by residing in that jurisdiction which has service levels closest to her own tastes.

> Spatial mobility provides the local public-goods counterpart to the private market's shopping trip. . . . If consumer-voters are fully mobile, the appropriate local governments, whose revenue-expenditure patterns are set, are adopted by the consumer-voters. While the solution may not be perfect because of institutional rigidities, this does not invalidate its importance. [Tiebout 1956, pp. 422, 424]

It is difficult to see how providing individuals a range of choice with respect to service-providing jurisdictions could do anything but help (or at least not hurt) everyone. But somehow, it seems, some individuals are made worse off when the shift is made from consolidated to local government. As Wallace Oates has written:

> Once we recognize that the demand for public services is systematically related to income, we see that the Tiebout model implies powerful tendencies toward segregation by income level. . . . The change from the typical prewar situation, in which most metropolitan residents lived in central cities, to the postwar situation, in which many high-income residents live in exclusionary suburbs, has tended to deprive the poor of most of the redistributive benefits accruing to the poor, while conferring benefits on upper-income households both in terms of reduced transfers through the local public sector and an enhanced efficiency in the local services they consume. [Mills and Oates 1975, pp. 5, 9]

The observation that fragmentation is biased towards middle and upper income groups is developed theoretically and empirically by Hill (1974), Danielson (1976), Markusen (1974), G. Miller (1977) and S. Miller and Tabb (1973). The theme of these articles is the same as Oates': the separation of income classes into different jurisdictions deprives lower-income groups of the resources that concentrate in upper-income jurisdictions. The result is a

> . . .spatially differentiated metropolis in which blacks are separated from whites, the poor from the more affluent, the disadvantaged from economic and educational opportunity, and local jurisdictions with the greatest public needs from communities which possess the greatest share of the public resources. [Danielson 1976, p. 1]

Thus, there seems to be an inescapable conflict between one group of individuals who maintain that multiple local governments are necessary for allocational efficiency, and another group who maintain that fragmentation of local government necessarily leads to an inequitable allocation of resources among income classes.

It is the purpose of this note to clarify, if not resolve this conflict by pointing out that <u>the allocational advantages of metropolitan fragmentation derive from one function of local government, while the redistributional disadvantages derive largely from a different function</u>. It is theoretically possible, therefore, to have a just <u>and</u> efficient organization of metropolitan government by centralizing one function of local government.

THE DISTRIBUTION OF REVENUE IN A FRAGMENTED METROPOLIS

Historically, one of the functions performed by local government has been the raising of revenue from a set of resources

that are in some sense "located" within the boundaries of the individual jurisdiction, and to which a kind of "property right" has been assigned by a higher level of government. This system of revenue allocation is in contrast to other feasible revenue-allocation systems in which (for instance) revenue is raised directly by the higher level of government and allocated among the lower-level local governments.

One of the consequences of this decentralized local control of revenue resources has been what Warren has called the "scramble for resources" (1958). There has been intense political conflict among local governments for the retail shopper, for industry, and for high-income residences. There has been an equally intense effort to <u>exclude</u> low-income or resource-draining residents through slum removal, selective annexation of residential developments, and zoning.

In Los Angeles, for instance, the conflict over resources was most obvious during the period of intense annexation and incorporation from 1954 to 1964, in which over 240 square miles of land, worth literally billions of dollars was fought over. A contemporary wrote:

> Owners and developers, actual and potential, of this vast deposit of natural wealth are locked in a tug-of-war to re-zone or unzone, to annex or incorporate with the basic aim of gaining control of land and hence land values. [Quoted in Pavlovskis 1973, p. 26]

As middle-class and upper-class individuals flocked to the newly created Lakewood Plan cities with their low tax rates, they drew many of the most desirable revenue resources with them. With the high-income residential developments went the lucrative regional shopping malls, the central offices for many large firms, and the desirable industry. On the other hand, many old-line cities became increasingly low-income in population and often experienced an actual decline in revenue resources. Hence the redistributional problem noted earlier: the jurisdictions with the most intense urban problems increasingly have the fewest resources to deal with them.

While the redistributional problem associated with fragmentation is related to a particular means of distributing revenue, the advantages of metropolitan fragmentation identified by Tiebout are independent of the means of distributing revenue among local governments, and depend only on local control of consumption decisions. For instance, imagine a system in which some metropolitan level of government (let us say the county) is responsible for setting tax rates, seeking state and federal grants, and in general raising revenue which they then distribute to local governments directly. Local governments would retain perfect autonomy over how that revenue will be used, but not over the size of the budget. The budget can be spent on a variety of local services or it can even be distributed among the members of the municipality in the form of a rebate. Such a system of metropolitan fragmentation would allow just as much individual

revelation of preferences and allocational efficiency as one in which the local governments retained control of the revenue-raising function. An individual could still choose among those municipalities for that pattern of expenditure that best suited his or her own preferences.

In fact, it is my contention that the efficiency benefits of fragmentation would be more operative in a system where revenue was equitably distributed by a central agency than in the present decentralized system. In the present system, one of the main reasons why an individual might choose one municipality over another is the resource advantage: in El Segundo, an individual can get better services in all categories for a lower tax price than in neighboring Compton because of the differences in resources in the two cities. This resource advantage could easily swamp any preferences the individual has over relative mixes of public services in the two cities.

To see this, let us imagine a situation in which there is one public good and one private good. The public good Q is provided by any of a series of local jurisdictions. The individual's budget (Y_i) goes towards his tax on the public good and towards consumption of the private good. His tax share is given by the proportion of property that he owns divided by the total property in the jurisdiction.

$$Y_i = p_z Z + (H_i / \sum_{i \in J} H_i) p_q Q_J N_J$$

where

p_z = price of the private good Z

p_q = price of the public good Q (assumed constant throughout the metropolitan area)

H_i = the property for which the individual z is taxed

Q_J = the amount of public good per capita in jurisdiction J

N_J = the population of jurisdiction J

The slope of the individual's budget constraint in a given municipality is given by

$$s = (H_i / \sum_{i \in J} H_i) Q_J N_J (p_q / p_z).$$

Now suppose the individual is considering purchasing a home in two different municipalities, say Santa Fe Springs and Maywood in Los Angeles County. The municipalities are close together, they have similar populations, and the homes he is looking at are similarly priced. The difference is that Santa Fe Springs has roughly nine times the taxable property per capita, and provides Q_S of the public good, while Maywood provides the smaller level Q_M. Because his budget constraint would be different in the two cities, his preferences for the public good would also be different. The flatter budget constraint in Santa Fe Springs acts as a price decrease, so he prefers Q_S^* in that city, and Q_M^* in Maywood. Now let us suppose that Q_M^* is equal to the actual level of provision of the public good in Maywood (Q_M). He endures no conformity cost

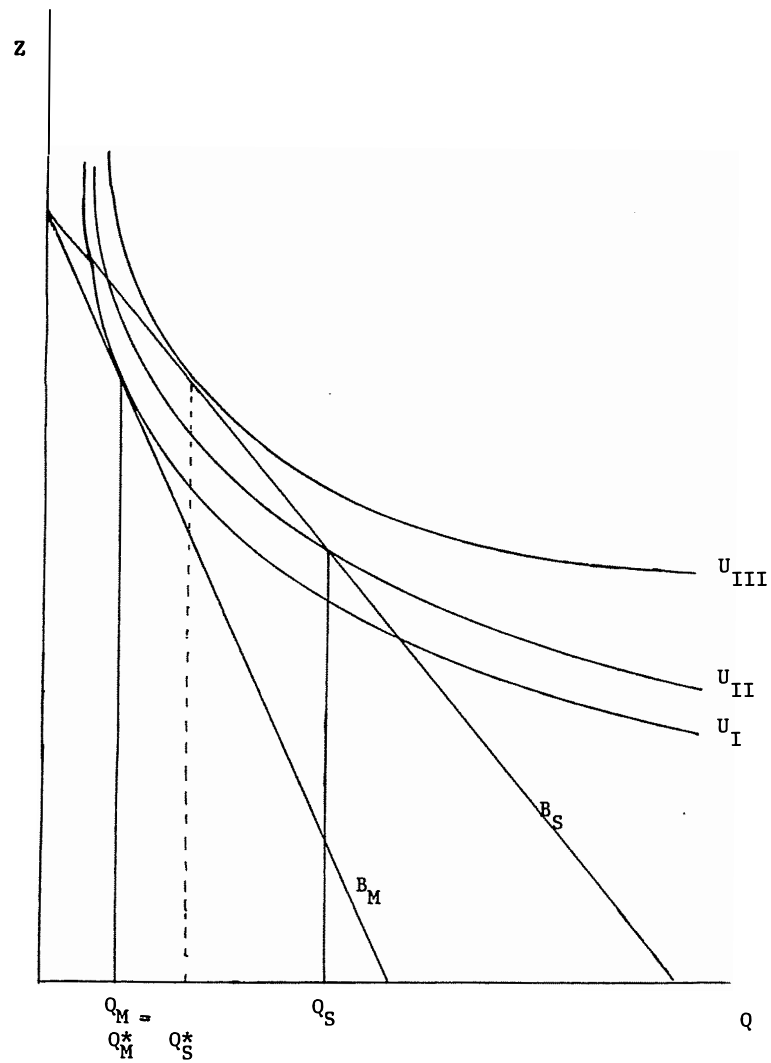
whatsoever in that municipality. He does in fact endure a large conformity cost in Santa Fe Springs, represented by the difference between U_{II} and U_{III}. But he will choose to live in that municipality which does not match his preferences rather than the one which does, because $U_{II} > U_I$. It is difficult to see how the Tiebout efficiency effect is operative in this case, since discrepancies in resources force the individual to reveal a preference for governmental output far removed from his true preferences. What he does reveal is a taste for resource-rich communities over poor ones, a taste that is probably shared by a great many people. (See Figure 1.)

On the other hand, if the county were to raise revenue by means of a uniform levy and then distribute the revenue in such a way that Maywood could still afford to provide Q_M and Santa Fe Springs Q_S, then the individual could choose between the two governments on the basis of his preferences for the two levels of public goods, as assumed by Tiebout.

The argument being made here is that by divorcing two functions of local government, and assigning one level to county government or higher, Tiebout's efficiency argument would obtain more perfectly. I would like to note that there is a precedent for this kind of argument. At one time, city-county consolidationists criticized metropolitan fragmentation on the grounds that small local governments could not realize economies of scale in the provision of municipal services, and therefore could not be efficient. Vincent Ostrom quite accurately pointed to the fallacy in this

FIGURE 1

The Effect of Different Budget Constraints
on Individual Preferences



argument, which is that small governments must necessarily supply themselves with municipal services by means of their own small, bureaucratic agencies (1961). As Ostrom points out, small local governments, acting as collective consumption units, can contract with the county or any other producer for any services for which the benefits of large scale obtain. Ostrom made this argument by conceptually clarifying the difference between local government as collective consumption unit and as service producer.

The analogy with my argument is close. Just as small local governments can divest themselves (or be divested of) the responsibility of actually providing municipal services, they can also be divested of the responsibility of translating resources into revenues. Acting as small collective consumption mechanisms, local governments can take a budget handed to them by a consolidated governmental level, make decisions about what services to spend that budget on, and procure those services by contracting with an agency of that higher governmental level or some other producer. <u>The benefits of fragmentation described would still hold</u>.

At this point, two objections might be raised to the argument in this note. The first is that the centralization of the revenue function is already occurring gradually, due to the increased importance of state and federal grants, revenue-sharing, and the property tax revolt, which undercuts the resource which has historically been the foundation of local autonomy over the revenue function. To the extent that this is true, the argument in my paper should reassure those proponents of local autonomy who rely on Tiebout for theoretical support: if revenue comes from the central government without strings attached, the Tiebout argument still applies. On the other hand, in the aftermath of the property tax revolt in California, the state government of California used its surplus to aid local government with conditions on how it should be spent and with the intent of reimbursing municipalities for lost property tax revenue. California's solution was thus the worst of both worlds: it failed to address the question of redistributional equity while limiting local autonomy over the collective consumption function.

A second objection that could be made is that the solution proposed is not politically viable. For county or state governments to undertake to distribute revenue to local governments flies in the face of entrenched political forces who benefit from local autonomy over revenue resources. Further, even if a central government were to undertake the function of revenue raising and distribution among local governments, there is no guarantee that this centralized revenue distribution would be more equitable than the old system of "squatter sovereignty."

With this point I am in basic agreement. I do believe that, with certain institutional safeguards to improve the political position of low-income groups in society, a centralized resource-allocation function could hardly do worse than the present system. However, absent such institutional safeguards, the distribution of revenue among local governments would be a pure redistributional issue; such an issue would be sure to be subject to the Arrow

paradox, and virtually any redistribution of resources would be theoretically possible (Ward 1961).

But the primary purpose of this paper was not to solve the equity problems that have been associated with metropolitan fragmentation, but to point out that a solution is theoretically feasible within the context of metropolitan fragmentation and the Tiebout argument. This was undertaken first by pointing out the conceptual distinction between local governments as collective consumption units and local governments as "owners" of revenue-bearing resources. As long as it is assumed that Tiebout's argument requires the second function as well as the first, then that argument will be misused to defend the present distribution of resources in the name of "efficiency."

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