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IS THE "INVISIBLE HAND" BIASED?
METROPOLITAN FRAGMENTATION AND INDIVIDUAL CHOICE

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IS THE "INVISIBLE HAND" BIASED?

Metropolitan Fragmentation and Individual Choice

by Gary J. Miller*

"Every change in the scope of conflict has a bias; it is partisan in nature."

E.E. Schattschneider (1960:4)

Because of its alleged disruption of efficient government, urban reformers have traditionally regarded metropolitan fragmentation as a major evil. The multiple, often small-sized urban governments found in most of our metropolitan areas are unable (it is charged) to realize economies of scale, to employ professional staffs, to engage in long-range planning, in short to deal effectively with the problems associated with the urban crisis. In addition, fragmentation is said to promote allocative inefficiency by inadequate handling of externalities. Municipalities may act as "free riders" by living off the positive externalities provided by their neighbors, or they may impose negative externalities on their neighbors in the form of air, water, or noise pollution. Both kinds of externality will result

in allocative inefficiency. The remedy for both transformational inefficiency and allocative inefficiency is the same, according to the traditional urban reform movement: construct "large" enough metropolitan governments to exploit economies of scale and to eliminate externalities.¹

In a truly significant article, economist Charles Tiebout (1956:416-424) developed a theoretical groundwork for an entirely different set of policy recommendations. Tiebout's article intended to show that fragmentation could serve a beneficial purpose by providing a choice of municipalities (each with its own mix of municipal goods and services) of residents of a metropolitan area. Assuming that individuals have different preferences for mixes of municipal goods and services, the existence of choice offers the opportunity for "voting with one's feet" to get a public goods mix as close as possible to one's most preferred mix. By this revelation of preferences, a more efficient allocation of resources for public goods can be achieved.

This article was perhaps the first in what has been called the "public choice approach" to urban reform (Bish and Ostrom, 1973:17-34). This approach views large-scale metropolitan government as likely to be too cumbersome and bureaucratic to be efficient. "A public economy composed of multiple jurisdictions is likely to be more efficient and responsive than a public economy organized as a single area-wide monopoly." (Bish and

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Ostrom, 1973:2.) Small-scale governments can obtain the advantages of economies of scale by contracting with large-scale producers, without sacrificing responsiveness (Ostrom et al., 1961:831-842.) In fact, with certain conditions, it is always more efficient to provide a public good with smaller rather than a single, consolidated jurisdiction (Oates, 1972:35.) To deal with externalities, a complex, overlapping system of multiple jurisdictions is advocated, so that the boundaries of the population affected by a public good will coincide as nearly as possible to the boundaries of the jurisdiction providing the good (Olson, 1969: 479-487.)

The public choice approach has provided a valuable alternative paradigm for urban reformers. It has demonstrated the usefulness of economic assumptions and means of analysis to the study of urban problems, and it has marshalled sufficient empirical evidence to demonstrate convincingly that many of the assumptions of the traditional, consolidationist urban reformers are simply unwarranted.² However, I am concerned that, in the present early stage of development of the public choice approach, a premature policy committal to the cause of fragmentation not be made.

As an example, public choice theorists often leave the impression that, while consolidation is necessarily harmful to the interests of many people, increased fragmentation could do nothing but help. Tiebout says (1956:423-424):

those who argue for a metropolitan police force instead of local police cannot prove their case on purely economic grounds. If one of the communities were to receive less police protection after integration than it received before, integration could be objected to as a violation of consumers' choice....[On the other hand] Policies that promote residential mobility and increase the knowledge of the consumer-voter will improve the allocation of governmental expenditures in the same sense that mobility among jobs and knowledge relevant to the location of industry and labor improve the allocation of private resources.

While consolidation will mean that at least some subset of the population will be forced to consume a public goods package that is farther from its preferences, increased fragmentation necessarily means that some individuals will be able to move to a location that more nearly satisfies their preferences. "The greater the number of communities and the greater variance among them, the closer the consumer will come to fully realizing his preference position." (Tiebout, 1956:418.) The implication seems to be that greater choice can hurt no one, but decreased choice must necessarily hurt someone. Municipal incorporation of small, homogeneous groups of individuals should be encouraged, because they are able to provide themselves with a public good package that suits themselves, at no harm to anyone else. As Bish describes the process (1971:137), "Families with similar tastes locate together, and often, incorporate as a municipality to preserve their selective residential environment."

It is interesting to note that this public choice defense of fragmentation, like the traditional reformist critique, is primarily based on the notion of allocative efficiency. Reading the advocates of one position or another, one gets the feeling that, if only the most efficient governmental organization could be achieved, a great "efficiency dividend" could be realized, much like the "efficiency dividend" that politicians suppose could be realized by "reorganization of the federal bureaucracy". On achieving just the right organizational formula, whether of greater or lesser fragmentation, everyone could be better off (at least with the right distribution of the dividend.)

Despite the fact that "efficiency" has dominated the discussion of metropolitan government (Greer, 1963:12), it is the position of this paper that efficiency is fundamentally irrelevant to an analysis of the politics of metropolitan organization. This is the case because institutional arrangements are so closely tied to the distribution of resources that a change in institutional arrangements inevitably has a redistributive (and thus political) bias. While the "ideal" arrangement of local governments may include a system of fragmented neighborhood governments, in the immediate reality of American government, a move to either consolidate or de-centralize metropolitan government could never be a universally beneficial move. There is no efficiency dividend. For this reason, efficiency arguments for and against fragmentation are pointless, and obscure the relevant political question: who

shall and should be helped, and who hurt, by changes in urban institutions? Who should get more and who less?

1. "Preference Position" and "Conformity Cost"

One assumption common to Tiebout and other public choice defenders of fragmentation is that individuals have markedly different tastes for public goods, and that these tastes motivate mobility from one jurisdiction to another, or even the creation of new jurisdictions. For instance, Tiebout says (1956:418):

The consumer-voter moves to that community whose local government best satisfies his set of preferences. The greater the number of communities and the greater variance among them, the closer the consumer will come to fully realizing his preference position. [emphasis added]

This use of the expression "preference position" seems to suggest that an individual has some ideal set of preferences for municipal goods, which does not change as he moves from community to community. Similarly, Bish states (1971:137) that "Families with 'similar tastes' locate together..." Oates discusses a concept called "conformity costs", which is a cost imposed on an individual that increases with the difference between his own preference position for public goods, and the particular package of public goods available in a given jurisdiction. Total "conformity costs" are seen to be necessarily smaller in small, homogeneous jurisdictions than in a single, heterogeneous jurisdiction, because at least some individuals will be closer to their

ideal "preference position". Tiebout's theory is thus about individuals minimizing "conformity costs" by locating in appropriate jurisdictions. "Conformity costs" is, of course, only a meaningful concept if there is something like a "preference position" that is unchanging in various jurisdictions; a preference position that changes as an individual crosses jurisdictional boundaries would not allow meaningful comparisons of costs incurred in different jurisdictions.

In all of these instances, I believe, the public choice theorists miss a fundamental and crucial point: the politically relevant phenomenon is not some immutable "preference position" based on an intrinsic set of "tastes" for public goods, but the quantity of a public good demanded by an individual in a given jurisdiction. And the quantity demanded of a public good is clearly a function of the opportunities and costs in a given jurisdiction. By clearly focussing on the factors that make the quantity demanded different in different jurisdictions, we can question whether inter-jurisdictional mobility is simply a benign process by which people with similar tastes find each other, like a giant romantic comedy with a happy ending.

To consider the easiest case, let us assume that an individual's income (y_i) is spent on his purchase of a private, excludable good (z_i) and on a tax for a municipally provided, non-excludable good such as police service. This good is measured as number of units of municipal output or activity (such

as patrol units) per capita, and is denoted by Q_J . The cost of providing the activity is of course, $r R_J$, where R_J is the number of units of the output provided by the municipal government, and r is the price per unit output, which is assumed to be invariant throughout the metropolitan area. Thus, for instance, the 1977 cost of contracting for a basic general patrol unit from the Los Angeles County Sheriff's Office is \$364,929, for those municipalities who contract with the county for this service.³ The cost of providing Q_J per capita units of police protection is $r Q_J N_J$. The cost to an individual in the jurisdiction is $t_i r Q_J N_J$, where t_i is the share of the cost he pays in taxes.

If the tax is not regressive or progressive, and if the budget is balanced, every individual will have a tax share equal to

$$t_i = \frac{y_i}{\sum_{i \in J} y_i}.$$

The budget constraint (assuming unitary price for the private good Z) is

$$y_i = z_i + t_i r Q_J N_J.$$

The budget constraints for individuals i and j , with incomes y_i and y_j , are shown in Figure 1. The z_i -intercept is shown to be a linear function of income, but as can be seen, the Q_J -intercept is not a function of the individual's wealth with a progressive taxation system. The Q_J -intercept is a function of per capita

wealth and the price of the municipal service. As this demonstrates, the slopes of the budget constraints must vary with income, which is of course not the case with budget constraints for strictly private good markets. Furthermore, an increase in per capita wealth in the jurisdiction acts as a price decrease, by flattening the slope of the budget constraint.

[Figure 1 goes here]

In the case of a proportional tax system, then, there is a difference in the slopes of budget constraints for individuals with different incomes. Regressivity tends to widen the difference in slopes. For instance, assume more generally that

$$t_i = \frac{y_i^\alpha}{\sum_{i \in J} (y_i^\alpha)} .$$

If α is greater than one, the tax will be progressive, and if it is less than one, the tax will be regressive. In Figure 2, budget constraints are shown for three individuals with 50 percent, 32 percent and 18 percent of the jurisdiction's wealth, respectively. The solid lines show the budget constraints under a progressive tax system, the dashed lines for a regressive tax system. The change from a proportional to regressive tax system (with $\alpha = 1/2$) serves as a price decrease for the richer individuals, and a price increase for the other two, thus increasing the difference in slopes.

[Figure 2 goes here]

Figure 1.

Budget Constraints for Individuals with Incomes y_i and y_j ,
Assuming Proportional Taxation and Balanced Budget

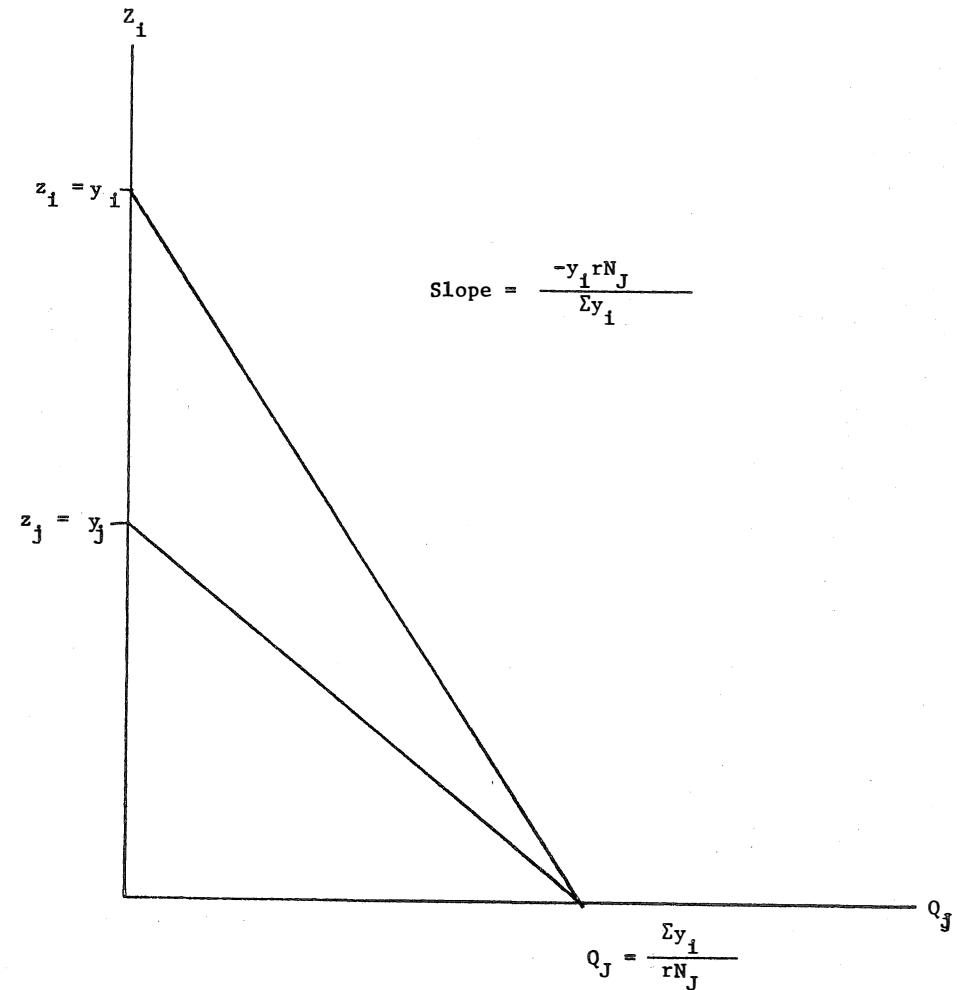
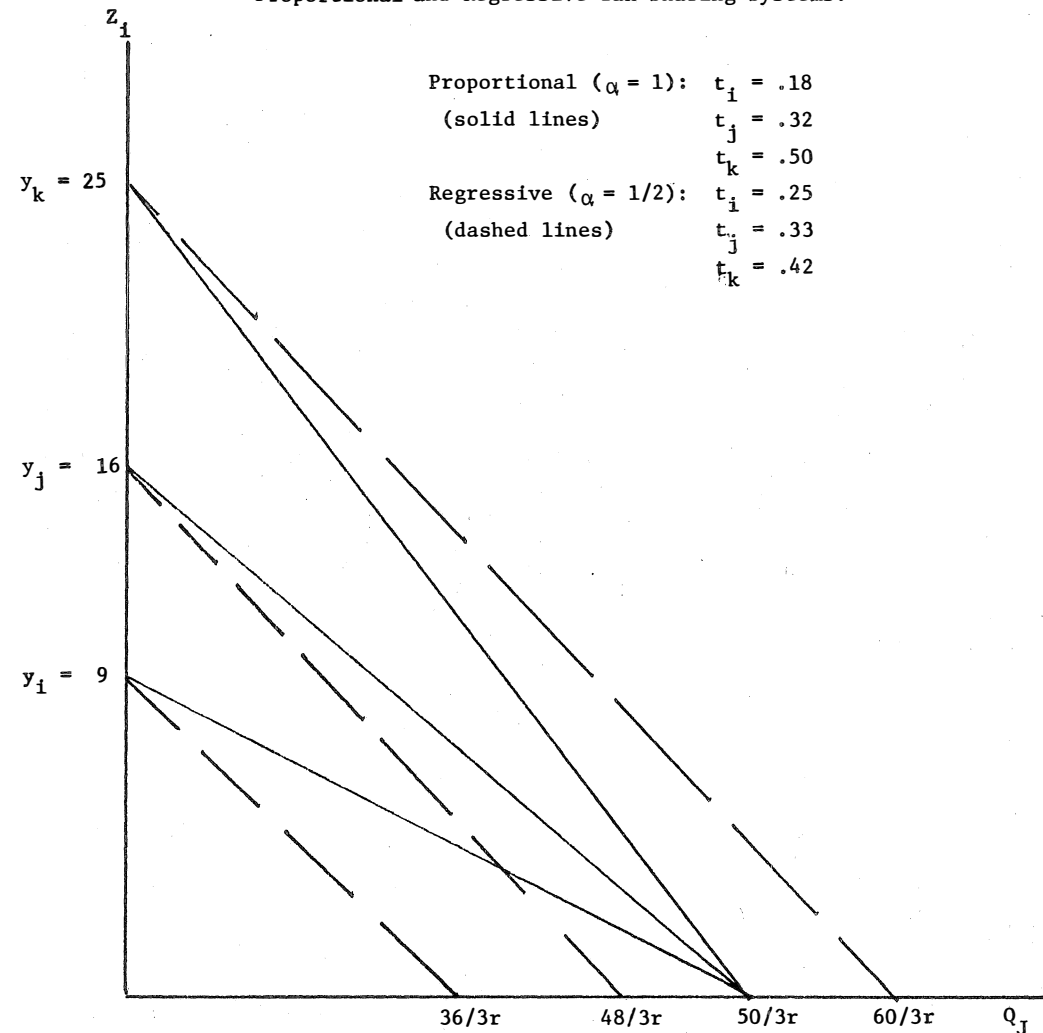


Figure 2.

Budget Constraints for Three Different Individuals with
Proportional and Regressive Tax Sharing Systems.



Furthermore, the income elasticity of demand will be different with different tax shares. For instance, with a utility function of the form $U_i = z_i^\alpha Q_j^B$, the demand function for the publically provided crowdable good is:

$$Q = \frac{B}{B+\gamma} \frac{Y_i}{t_i r N_j}$$

With a straight head tax, this demand function results in unitary income elasticity. With a proportional tax share, the good becomes a neutral good. With a progressive tax share, the good becomes an inferior public good, and with a regressive tax share, the same demand function represents a normal good.

The fact that the quantity demanded of the public good varies with tax shares and with the wealth of the jurisdiction, has several important implications for the public choice defense of fragmentation. First, income will be a highly significant factor determining articulated "preferences" for public goods; this means that the clustering of individuals with similar "tastes" for public good will result in a tendency towards segregation by income. Second, the quantity of a public good demanded by an individual is also dependent on the tax share he must pay in a particular jurisdiction with a particular population. Thus, the concept of "conformity costs", in as much as it is dependent on the idea of a static "preference position" for individuals, is unworkable. The quantity demanded by an individual may shift as he moves to a new jurisdiction, or if he simply stays

in a single jurisdiction in which other people are moving in and out.

Furthermore, an individual may be better off in a large, consolidated jurisdiction in which his quantity demanded is different from that which he is receiving, than he would be in a smaller, homogeneous jurisdiction where he is getting exactly the quantity he demands. And conversely, a poor individual may be worse off in a fragmented metropolitan jurisdiction, where the jurisdiction is completely responsive to his articulated demands, than he would be in a consolidated metropolis that is unresponsive.

A single, simplified, but not totally unrealistic example may serve to illustrate all of the points made above. Let us assume a population of individuals is divided into three equally sized income classes. We assume there are ten individuals in each income class, and that individuals in the highest income class have income Y . The individuals in the middle income class all have income $.64(Y)$, and those in the lowest income class all have income $.36(Y)$. There are two goods, one a private good, and one a crowdateable, but non-excludable publically provided good. All individuals have identical utility functions of the form $U_i = Z_i^{1/2} Q^{1/2}$. The price of Z is assumed to be unity. The taxing system is regressive, with the tax share for the i^{th}

individual being given by $t_i = \frac{\sqrt{y_i}}{\sum \sqrt{y_i}}$. These assumptions

result in the demand functions given in the table on the following page. Since there is but one public good, the median voter's preference is the Condorcet winner, and that is assumed to be the quantity of the public good actually provided. This results in the tax totals and utilities given in the rest of the tables in terms of Y and r .

[Tables 1 and 2 go here]

Now we assume that two other jurisdictions are set up on the outskirts of the central jurisdiction, but within easy commuting distance of the original city, so that commuting costs are neglected. Individuals are faced with a choice of jurisdictions. This situation exactly fits that described by Tiebout, since there are an adequate number of municipalities now to satisfy the range of demands of the total population, and since there are no mobility costs. We would predict, with Tiebout, that the residential equilibrium would result in perfect stratification of the population, with each municipality serving each income class perfectly, and with no "conformity costs". But as can be seen by Table II, this does not mean that everyone is better off in the fragmented metropolitan area. On the contrary, the lower class is worse off, by a rather drastic amount.

The reason for this is that, even though the consolidated metropolitan government had a regressive taxation system, the presence of the wealthy individuals was a "positive externality" for the lower income classes, who benefitted from their resources.

Table 1

Consolidated Metropolitan Government

	Lower Income Group	Middle Income Group	Upper Income Group
Size	10	10	10
U_i	$z_i^{1/2} Q_J^{1/2}$	$z_i^{1/2} Q_J^{1/2}$	$z_i^{1/2} Q_J^{1/2}$
y_i	(.36)Y	(.64)Y	Y
t_i	.025	.033	.042
Q demanded	(.24)Y/r	(.32)Y/r	(.42)Y/r
Q received	(.32)Y/r	(.32)Y/r	(.32)Y/r
Total Cost of $Q_J = (9.6)Y$			
Tax Total for each individual	(.24)Y	(.32)Y	(.40)Y
z_i	(.12)Y	(.32)Y	(.60)Y
U_i	$\frac{(.196)Y}{r^{1/2}}$	$\frac{(.32)Y}{r^{1/2}}$	$\frac{(.438)Y}{r^{1/2}}$

Table 2

Three Fragmented Metropolitan Governments

	Lower Income Govt.	Middle Income Govt.	Upper Income Govt.
Size	10	10	10
U_i	$z_i^{1/2} Q_i^{1/2}$	$z_i^{1/2} Q_i^{1/2}$	$z_i^{1/2} Q_i^{1/2}$
y_i	(.36)Y	(.64)Y	Y
t_i	.100	.100	.100
Q demanded and Q received	(.18)Y/r	(.32)Y/r	(.50)Y/r
Tax Total	(.18)Y	(.32)Y	(.50)Y
z_i	(.18)Y	(.32)Y	(.50)Y
U_i	$\frac{(.18)Y}{r^{1/2}}$	$\frac{(.32)Y}{r^{1/2}}$	$\frac{(.50)Y}{r^{1/2}}$

2. Metropolitan Organization and Institutional Bias

This suggests that alternative structures of governmental institutions in a metropolis have different biases. Metropolitan consolidation, other things being equal, has a redistributive, pro-lower class bias. On the other hand, community choice is a bane to the lower income individuals. Once the choice of municipalities was made freely available to all the population, the fate of the lower class individuals was sealed. This example has obvious implications for other metropolitan areas.

For instance Bish (1971:84), in discussing the benefits of metropolitan fragmentation in Los Angeles cites the existence of variable demand for library services, which were not being met by the county-wide library system. The fragmented metropolitan system allowed an improvement on this situation.

Another group of municipalities to withdraw from the country library system was composed of citizens who had much higher demands for library services. Beverly Hills and San Marino withdrew and provided a higher level of service with higher budget allocations than either the county service or independent library districts of comparable size in the county. It is not clear whether the move resulted in increased tax rates because they had higher-than-average property valuations, and library services at a higher level than the county offered could have been provided without raising tax rates.

Obviously, this improved the lot of the citizens of Beverly Hills and San Marino: they got better library services at the same cost to the individual. However, it also had a detrimental effect to

those individuals left covered by the county-wide system. They would have been better off if it had been illegal to withdraw from the system.

Returning to our example, if there had been a vote among the 30 citizens on the question of whether or not to allow the incorporation of the two neighboring cities, it should rationally have been defeated by a 2 to 1 margin. However, in real life, the legal system seems to take the position taken by the public choice theorists.

Similarly, Bish notes (1971:137) the way in which the incorporation of new municipalities in Los Angeles County has allowed families "with similar tastes" to "incorporate as a municipality to preserve their selective residential environment. This has resulted in a situation in which (1971:102) "the individual cities within Los Angeles County, with their homogeneous groupings of citizens, seem able to reflect demand quite efficiently." As examples, he gives the case of Rolling Hills (1971:88):

Incorporated in 1957, this area is composed almost exclusively of one- to five-acre estates on the Palos Verdes Peninsula... The city is entirely residential; it is a single-purpose city; there is no industry, no manufacturing...(The citizens) want to keep it, and they are willing to pay for it.

Here is no evidence of a small group of individuals clustering together because they have similar tastes for public goods. Instead, Rolling Hills seems to be a group of individuals who have similar resources to provide themselves with the good life, and are willing

to erect whatever institutional boundaries are necessary to protect it.

Similarly, Bish points out the City of Industry (1971:89) whose boundaries were drawn to include commercial and industrial land. It records a per capita property value of \$54,868 for its 638 inhabitants...Industry was quite satisfied with county-level services, and since its incorporation, has found it unnecessary to levy a municipal property tax because sales tax revenues and other state funds have been sufficient to meet county contract payments. Here again, there is no evidence that the 638 inhabitants of Industry share anything besides a desire to maintain a per capita property value of \$54,868. As Bish himself states (1971:89),

Their incorporation served to prevent the imposition of political externalities by neighboring municipalities that wanted to acquire their relatively high tax bases for financing of public goods and services for their own citizens.

In fact, by fiscal year 1970-71, the population of Industry was virtually unchanged, and the property per capita figure had risen to \$163,000, which had yet to be taxed to provide municipal services.

A brief examination of the history of new incorporations in Los Angeles County since World War II indicates that Rolling Hills and Industry were typical, rather than unique, in their motivation. Although none of the cities incorporated before that time have zero property tax rates, 22 of 32 post-war cities had zero property tax rates in 1971.

Returning to our mythical 30-person metropolitan area, if there had been a vote among the total population on the question of whether or not to allow the incorporation of the two adjoining cities, it would probably have been defeated by a 2 to 1 margin. However, in real life, the legal system seems to take the position taken by the public choice theorists, that the creation of a new municipality affects no one but those who live in it. In California, the Municipal Corporation Act operates under the principle, that "a municipal corporation is considered to be a voluntary creation, brought into being only at the request of local inhabitants..." (Crouch and Dinerman, 1964:81). Although the county board of supervisors is responsible for overseeing the process of incorporation, their actions are strictly regulated by state law, except that they may choose to substract property from the prospective incorporation that was mentioned in the petition from local inhabitants that originated the incorporation procedure. The final step in incorporation is an election among the inhabitants of the proposed municipality. Individuals in neighboring municipalities have little or no say. An increased range of choice of communities thus can occur fairly easily and automatically, despite the potential effects this might have on other inhabitants of the metropolitan area. The relative ease with which increased fragmentation can take place, and the relative difficulty of increased consolidation, suggest an anti-lower class bias in the legal structure provided for metropolitan institutions.

3. Fragmentation, Pareto Optimality, and Choice

One of the central controversies in the historical dialogue concerning the just society has been that between free individual choice versus social and political authority, or what Wolff has called (1970:3-20) "the conflict between authority and autonomy." Hobbes, making the argument for authority, has invoked a kind of Prisoners' Dilemma (1902:98-113); that is, individuals in a situation of completely free choice will remain in a sub-optimal state of nature. Some degree of authority is necessary it is argue , to restrict individual choice and thus to achieve a more efficient outcome.

Adam Smith's "Invisible Hand" argument is one of the clearest defenses of individual autonomy (1952:182-300). He makes this case by arguing the coincidence of choice and efficiency. That is, in certain situations, individuals, acting of their own free will and in their own best interests, will achieve a collectively efficient outcome.

In American society, at least, the "Invisible Hand" kind of argument has grounded an intense popular belief in individual choice as a value. It is often argued further that anything which extends the range of individual choices is also valuable. A wider range of goods and services in the market extends individual choice opportunities and is therefore good. The army promotes itself by advertising the wide range of jobs from which a recruit may choose. The Republican and Democratic parties are condemned

when they seem to offer identical platforms, and so Goldwater offers a "choice, not an echo."

Economists, in particular, are found in support of the liberal pro-individual choice position more often than not, and they are strengthened in this position by the firm result in welfare economics that individual rational choice, in a free, competitive, private goods market, results in a Pareto optimal distribution of goods and services in that market. Restricting individual choice (for example, by denying certain alternatives for some buyers in the market) can only result in sub-optimality.

Thus, welfare economics, it seems, has provided a "scientific reason" to come down in favor of human choice and the invisible hand, and in opposition to central direction and hierarchical authority.

Public goods are viewed as problematic by economists precisely because they spoil this nice result. A Pareto-optimal distribution of public goods is one in which the sums of individual marginal benefits is equal to marginal cost. But a rational individual will choose to equate his own marginal benefit and marginal cost. We suddenly find ourselves in a Prisoners' Dilemma, with individual choice implying sub-optimal equilibria.

Escaping from the Prisoners' Dilemma of public good sub-optimality is almost as distasteful as remaining in it, because escape, as a practical, political problem, seems to imply some diminution of individual freedom of choice. We must rely on a

self-interested political organizer to set up political organization, who will limit our choice set by means of selective incentives, so that we will be forced to donate to the provision of a public good. Rather than the beauty and simplicity of the Invisible Hand, we are left with the sordid messiness of self-interested politicians, large scale organizations, the Iron Law of Oligarchy, and all simply to restrict our choice sets and provide the optimal level of public goods. Maybe we don't want those public goods after all?

Tiebout's result was significant, from the standpoint of political philosophy, because it seemed to restore the coincidence of efficiency and individual choice in the troublesome area of public good provision. Tiebout wrote (1956:416) "Seemingly, we are faced with the problem of having a rather large portion of our national income allocated in a 'non-optimal' way when compared with the private sector." However, he hoped to show that the problem of sub-optimal equilibria while "valid for federal expenditures, need not apply to local expenditures." That is, by maintaining and even increasing the range of individual choice over a dimension that had not yet entered economic analysis (the number of municipalities supply local public goods) we could again find that the Invisible Hand led to an optimal solution.

While Tiebout's analysis does demonstrate that the fragmented metropolitan institutional form can indeed provide efficient result, given residential mobility, it is important, it

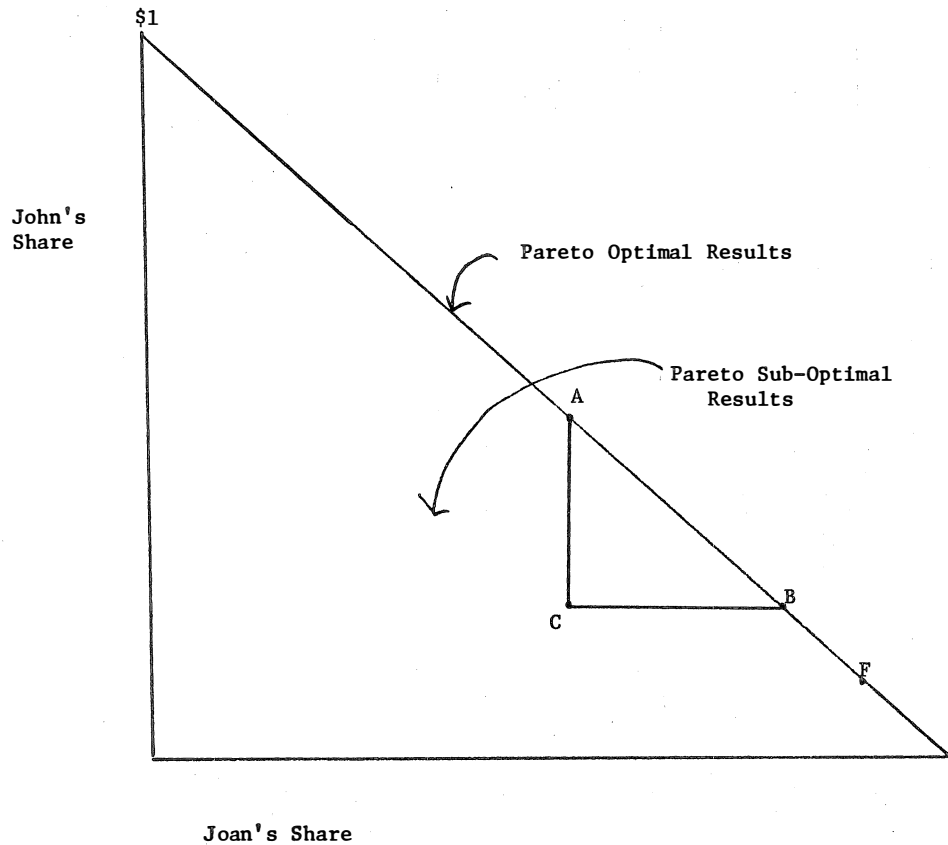
seems to me, to notice that it might well be a biased efficient result. To illustrate what I mean by this concept, let us consider a divide-the-dollar game between two individuals, as shown in Figure 3. In this game, C is not a Pareto-optimal result, and F is. However, a move from C to F is not a Pareto-optimal move, because John is worse off in F than he is in C. If for institutional reasons the only feasible choices are C and F, then I would argue that Pareto Optimality is not a compelling reason to choose F over C.

[Figure 3 goes here]

In the fragmentation-consolidation example in the earlier section, institutional limitations in the form of a given taxation system, given collective decision rules, and given limitations on what items are on the agenda, made the move from the inefficient consolidated structure to the efficient fragmented structure a non-Pareto optimal move. These institutional parameters make the choice between fragmentation and consolidation a choice of institutional biases, since fragmentation tends to be biased in favor of higher-income groups and consolidation in favor of lower-income groups. Thus, for policy purposes, it is not sufficient to opt for fragmentation because it is an "efficient" result while consolidation is not. Any given policy decision may provide a choice much like that between C and F in the divide-the-dollar game. Such a choice is an essentially political choice, motivated by redistributive, political, and normative considerations other than efficiency.

Figure 3

A Divide-the-Dollar Game



If Pareto-optimality is not a sufficient normative guideline for a policy decision regarding metropolitan government, is "individual choice" any better? It cannot be denied that "individual choice", if taken as an intrinsic value, would dictate that metropolitan fragmentation is "better" than consolidation. However, I have argued in this paper that the existence of choice may itself imply a bias in the system. To illustrate this idea further, I would like to identify several different kinds of games. Let us imagine a two-person game with a narrow strategy choice set for each player, and a dominant strategy equilibrium given the narrow choice sets. Now let us imagine that the institutional setting of the game changes, and the result is a wider range of options for each player, with a new dominant strategy equilibrium. This setting is illustrated by the three games in Figure 4. In each game, the narrow choice set is just one alternative for each player, and the dominant strategy equilibrium is the upper left-hand corner box. The dominant strategy equilibrium with a widened choice set is the lower right-hand corner box.

[Figure 4 goes here]

The interesting difference among the three games is how the new, stronger equilibrium compares with the old. In game I, everyone is better off with the wider choice set. In game II, everyone is worse off. This game is of course a form of the Prisoners' Dilemma. And in game III, one person is better off, and one person worse off.

Figure 4
The Ambiguous Value of Choice

		Joan	
		Narrow	Wider
John	Narrow Choice	0,0	-2,10
	Wider Choice	10,-2	8,8

Game I

Wider Choice Equilibrium
Unambiguously Better

		Joan	
		Narrow	Wider
John	Narrow Choice	8,8	-2,10
	Wider Choice	10,-2	0,0

Game II

Prisoner's Dilemma

		Joan	
		Narrow	Wider
John	Narrow Choice	0,8	-2,10
	Wider Choice	10,-2	8,0

Game III

Institutional Bias

In game I, the players will be able to agree that the new institutional setting, with its wider range of choice, is unambiguously better. There is a nice coincidence of efficiency and widened individual choice. In game II, the Invisible Hand is the hand of a malevolent force, guiding the players to an inefficient result. The presence of choice is a curse to the players. If they can possibly do so, they would like to organize to return to institutional setting that deprives them of choice. Thus, in both games I and II, there is no conflict among the players over which institutional form is preferred.

However, in game III, the institutional setting is itself a matter of conflict. The allocation of rewards in the game is settled by deciding which game is played, so for strategic reasons, the conflict over institutional form becomes paramount. The institution of a wider choice set has a bias towards John, the institution of a narrower choice set has a bias towards Joan.

The essential point of this paper is a very limited one. The discussion of metropolitan fragmentation has up to this time been largely framed in terms of those who see the presence of choice among municipalities as a game I or game II situation. The traditional metropolitan reform advocates have suggested that the presence of multiple, overlapping jurisdictions is a curse. They have suggested that if urban residents could just organize themselves into a different, consolidated institutional setting,

in which choice of jurisdictional public goods is denied them, everyone would be better off, because of improved governmental efficiency. The public choice analysts, however, have argued that everyone can be better off by widening the choice of municipalities, thus providing everyone the opportunity to move to that jurisdiction with a mix of local public goods most suited to their tastes, as in game II.

It is the choice of this paper to suggest that in this case the choice of institutions is partisan, conflictual, and biased, as in Game III. Certain individuals are helped, others hurt by the institution of a wider (or narrower) choice range. To argue that a low-income person is not hurt by adding another jurisdiction to which he may or may not move is like arguing that Joan is not hurt by adding a second strategy alternative in game III. Certainly no one is making the low-income individual choose any particular municipality, but the widening of the choice set makes him worse off no matter which he chooses, because the old equilibrium is no longer available to him. Just as John's choice of the new strategy carries with it an "externality" for John of 10 units, so the movement of high-income groups to exclusive suburbs where they can provide themselves the local public goods that suit them, may carry with it an "externality" to the low-income groups that makes the widening of his choices of negative value. For practical, political purposes, the existence of

individual choice may have negative, instead of positive value, and thus must be looked on as an instrumental value, rather than being valued in itself.

While the "Invisible Hand" argument supports fragmentation by suggesting a coincidence of individual choice and economic efficiency, this paper has sought to demonstrate that the "Invisible Hand" is not compelling in this case. An institutional bias imposed by such parameters as the local taxation system and the nature of the state and local legal systems, makes the organization of metropolitan governments an issue that must be addressed and resolved as an essentially redistributational and politically conflictual problem.

NOTES

1. Because the purpose of this paper is not primarily to review the traditional urban reform position, this position was only briefly stated, and no doubt somewhat distorted. For a more complete statement of the traditional urban reform position, see Haar (1972), Lineberry (1970), and the Committee for Economic Development (1966), (1972).
2. In the area of police services, for instance, see Elinor Ostrom and Roger Parks (1973).
3. This is the cost for a patrol unit, defined as 280 hours of patrol a week, with the patrol car, and support services including detective work, supervision, overhead, and maintenance.
4. The per capita definition of Q requires the assumption of a perfectly crowdatable public good, unless the utility function contains an argument for N_j . The analysis in this paper could be generalized to include variable crowdability for the public good.

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