LOCAL Vs. CENTRAL GOVERNMENT IN THE THEORY OF PUBLIC FINANCE

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Economic theory has been very successful in developing models for the analysis of the activities of private agents be it consumers or producers of goods and services. The basic model has remained for many years the competitive model. There are also many interesting developments into the fields of market arrangements which are not perfectly competitive. Thus the theory of industrial organization is very active recently with many models of duopolies, oligopolies and monopolistic competition.

Any objective observer must be aware of the continuously increasing role of government in the economy. This is true also in western countries. The study of the government in the economy is the subject of public finance (which is the subject of this chair). Public finance has developed in many important aspects - positive aspects answering questions of what is:

(1) The effect of taxation on the distribution of income;

(2) The effect on the allocation of resources;

(3) Stabilization policies and the effects on economic activity;

and normative aspects referring to what should be:

(4) Optimal Taxation;

(5) Cost benefit analysis.

However, the development of a positive theory of government behavior given a changing environment is still at its very beginning. Economists think they know the answer to the question of how would an individual consumer, still better, consumers in the sense of average consumer, react to a change in the price of oil. But we know much less about how a government would react. In most economic analyses this question is assumed exogeneous, i.e. outside the sphere of economic analysis.

Nevertheless, economists have tried different ways of incorporating these problems to economic theory. Some of them are an extention of the individual behavior model regarding the government as maximizing some objective function. However, a positive theory needs an explicit objective function and such a function has not yet been suggested. Others have tried to develop some political behavior models. Advance was made but also some frustrating results have been derived, such as Arrow's impossibility theorem proving that when individual tastes are diverse, democratic decision rule may not be consistent. More formally, decisions under fairly weak conditions would not be transitive.

I wish to report here another line of approach to this problem, an approach that has been developed for the analysis of local government. Local governments are, of course, an important part of government, and justify the study of their characteristics for their own sake. But here we shall also consider the implications of the theory of local governments for other levels of government.

The structure of local government is different in different countries. In Israel, local government is represented by municipalities; other countries with federal structure have several layers of local government such as state, county, city, and perhaps even smaller units such as a district school board within a city. The theory that I am discussing now can deal with these different layers of local governments but for simplicity we shall assume just one layer, i.e., we consider a case where we have just one central government and communities controlled by local government.

The basic work, one can say now a classic breakthrough, is due to Tiebout (1956) J.P.E. "A Pure Theory of Local Expenditure." He introduced a model of a system of competing communities and has suggested the following results:

(1) Communities will provide the optimal menu of public services, produce the services efficiently, and adopt the optimal tax structure. I may say the system of local governments will be efficient.

(2) Communities will attract populations of identical tastes.

He seemed to be able to derive these results by the introduction of an innovative assumption-costless mobility. It seems obvious that if mobility among communities is costless then the individual will choose to reside in the community that provides the mix of services that he prefers. This forces communities to take preferences into account.

Tiebout's paper had all the ingredients of a breakthrough, i.e. it had a completely innovative approach - costless mobility; promising implications, defining the conditions of efficient government and deriving the conditions for its existence; some empirical indications that made the new theorem plausible, suburbs tending to be inhabited by people of similar tastes; a very primitive and incoherent analysis that left the topic open to many different approaches and has thus created a continuous, and recently increasing stream of works.[1]

The innovation of costless mobility is admittedly an abstraction from reality, completely contrary to what economists generally assume on the national level. The basic assumption of international trade theory is that factors (especially people) are immobile.[2]

Some reflection may perhaps help clarify that costless mobility may perhaps not be an absurd approximation to reality. A young person selecting a community where to live may find it somewhat costly to leave the place where he was born but may find that costs are not significantly different, if he moves to community A instead of B. Furthermore, statistical studies in both developed and undeveloped countries show that mobility among communities is very large. Over relatively short periods some communities are significantly growing and others are declining in population.

Consider the implications of mobility to local governments:

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1 The number of Tieboût-type models is very large. It is impossible to do justice to the different contributions in a short paper like this; for a comprehensive list of references see Sandler T. and Tschirhart, J. (1980) The Theory of Clubs: A Survey, Journal of Economic Literature.

2 This is perhaps an excellent example of the role of extreme assumptions in the development of theory. People are, of course, mobile and mobility is not costless. But we understand better mobility by considering the effect of two extreme opposite cases.

(1) Efficient provision of services. If a local government did provide services inefficiently, say by inefficient production, or provided services that were not desired by the population then people will move to other communities which provide better services.

(2) Local governments cannot redistribute income. Say tax the rich and provide subsidized or free services to the poor. The reason being that with costless mobility the community that follows these policies will attract immigration of poor people and dispel the rich.

At this point you may have some regrets over (tentatively) accepting the free mobility assumption. But perhaps some reflection on the case of New York will convince you that we are not dealing with an "empty box". We did have in Israel examples where industry was moving out of some localities, blaming local governments for making the localities unattractive. This is, of course, a related phenomenon.

The result that local government cannot efficiently redistribute income is disturbing to many people. One answer is that perhaps they can do it by agreeing to follow similar redistributive policies. Say the same tax rates everywhere. Regretfully it can be shown that this solution may lead to an unstable system "with the poor still chasing away the rich," while the rich will adopt policies (zoning is an obvious example) that may prevent the poor from coming. The other possibility is to leave income redistribution to the central government. This introduces the interesting and meaningful question of division of functions between local and central government, a question which is beyond the scope of my topic today, but which, however, is a natural question of the post Tiebout research.

Perhaps the most difficult social question is the implication that people will like to join communities inhabited by people of similar tastes. This does not perhaps seem disturbing when one has in mind an example such as Bnei Brak, a community inhabited by extremely religious people who prefer getting services adjusted to their tastes, such as becoming completely closed on Saturdays, religious schools and religious cultural activities, etc. With free mobility non-religious people will prefer to stay out of the place. One can see, even without explicit modeling that there is some advantage in this case of separating by tastes. However, one can easily provide examples that separation by tastes will not be socially easily acceptable. When preferred services depend on income and the poor demand different services from the rich, are separate communities socially desirable? Separation, according to race or ethnic groups, become even more objectionable.

Tiebout claimed that he has proved that segregation according to tastes was efficient. Nevertheless it took many years to develop the analytical models and derive the necessary conditions where this result will hold. One can say today that there are advantages to segregation according to tastes. However, a completely different result has started to emerge just recently - there are also advantages to the mixing of people with different tastes and skills.[3]

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3 For the mixing literature see my papers entitled "Local Public Services, Quantities, Qualities, Transaction Costs and Multiplicity of Services Working Paper No.35-81, August 1981 The Foerder Institute, and "Distribution of Tastes and Skills and the Provision of Local Public Goods" (1976) Journal of Public Economics.

There are two sources to the advantage of mixing different people. First consider people as consumers, when by different tastes we mean that they may demand (at given prices) different mixes of cultural recreation and, say, transport services. If each community were composed of identical people and assuming the plausible assumption that in these services unit cost of providing the service depends on the level of output then one can prove that there are advantages to mixing. In the sense that if everybody was offered the choice, he will prefer the mixed community. Mixing allows for a more efficient production and better utilization of services.

The proof of this theorem is quite technical but an intuitive explanation is possible. Assume that you have two types of consumers, A's and B's. If unit costs depend on the level of outputs, then given differences in tastes in pure type A communities the cost per unit and prices of services will be different from those in type B communities. The existence of different prices means that there are potential gains. These gains can be utilized by mixing. Mixing is really an extention of the basic economic principle that efficiency requires the same price for everybody.

The earlier example of Bnei Brak that we have used to demonstrate the advantage of separation may now seem disturbing. The explanation of the apparent contradiction is simple. Diversity of tastes implies both demanding services of different qualities and demanding similar services in different quantities. The earlier example of Bnei Brak is an extreme example of different tastes with regard to quality where some people demand and others do not demand religious services. Divergence in tastes with regard to qualities results in advantages to separation while divergence with regard to quantities leads to advantages of mixing.

A completely different reason for mixing comes from the observation that in general a community is not only a consumption unit but also a production unit. People tend to live near their work place, and working places do not demand identical people. Thus one can expect to find in the same community or urban center, both skilled and unskilled workers, professionals of different professions, etc. This is another reason that makes mixed communities desirable.

What is perhaps most interesting is that although these results have not been foreseen by Tiebout and are even contradicting one of his major results it has been shown that they do not contradict the result that costless mobility results in an efficient government. At this stage question might arise. If this theory is correct, how does one explain that there is, I think, a general agreement that local governments do not always constitute an example of universal efficiency. There are several answers.

Costless mobility is not a good approximation for the short run. Thus inefficiency can persist for restricted periods. More important efficiency requires that the division of roles between local and central government will be done in a way that is conducive to efficient operation of local government. While a complete specification of this division of functions is beyond the scope of this paper, some elements of this division should be made clear; redistribution of income should be left to central government while provision of local services, including the choice of technique of their production should be left to local government. Central government can help local government in raising taxes, but these taxes should be distributed to local governments under a known formula, and, most important, regardless of the service mix provided by the local government. Local disadvantages may be compensated by a special grant for different disadvatnaged areas but this also should be done only according to a wellknown, long term, formula. Lastly, central government should not be responsible for deficits on the local scene. In all circumstances one has to avoid the situation where local governments are allowed to adopt policies (strategies) that create deficits and then turn to the central government for financial support. This is, of course, not a full list, but is sufficient to explain the persistence of inefficiency and indicate ways of improvements.

It seems to me that the result of these studies will, in the future, lead to a better allocation of functions between different layers of government, to a better understanding of the role of local government, and a more efficient government system.

However, perhaps a more basic conclusion is that in a modern society voting in the ballots is only one way of utilizing democratic rights. The other vote which is perhaps not less important in the local scene is "voting by feet". A vote in the ballot that does not consider the "other vote" is bound to fail. Voting by feet is a safeguard against the tyranny of the majority. It forces the majority to consider the contributions of the minority to pursue a policy that respects their preferences and thus prevent their outmigration. It is very interesting to note that one can prove that in quite general circumstances respecting minority preferences is not only what one may refer to as equitable policy but also that this is an efficient policy and that it will be pursued in a properly designed decentralized system.

What are the implications for central government? As stated earlier by and large "voting by feet" has been ignored on the national level. For over two hundred years, economists have been assuming that international mobility does not exist or is very costly. It is a true statement that it is much more difficult (costly) to move from Tel Aviv to Rio de Janiero than from Tel Aviv to Jerusalem. Barriers of language and culture may be even more important than transport costs. However, it seems to me that we are living on a shrinking globe with respect to both physical and cultural costs of mobility. Several groups in the population find already today that transport costs are not prohibitive. Consider the case of faculty members, physicians (even in the face of local examination) and also people working for multinational corporations. Is it unthinkable that an Israeli firm will decide where to locate an activity to be manned by Israelis by considering the location preferences of their potential workers. A separate topic of a similar nature is the effects of government policies on international capital mobility.

I do think that understanding these processes will result in a better understanding of governments and perhaps it is not too ambitious even in better governments.