European Economic Review 36 (1992) 639–646. North-Holland

Fiscal Federalism and the Theory of Clubs

Federalism and clubs

Towards an economic theory of overlapping political jurisdictions

Alessandra Casella*

University of California at Berkeley, Berkeley, CA 94720, USA

Bruno Frey

Universität Zurich, CH-8008 Zurich, Switzerland

1. Introduction

The debate on fiscal federalism in the European Community has become intense as the deadline for the creation of a single market draws nearer.

This development stems from two broad classes of reasons. First of all, there are immediate effects from markets' integration. Without barriers to trade taxes may need to be harmonized, compromising the ability of any single country to pursue policies in isolation. Redistributive measures in particular will have to be deferred to the Community [see, for example, van Rompuy, Abraham and Heremans (1990)]. At the same time, the movement to a single market will probably benefit some countries and harm others. The need to compensate the losers implies again a widened fiscal role for the Community. These are the main motivations behind the anticipated doubling of the Community's Structural Funds from ECU 7.7 billions in 1988 to ECU 14.5 billions by 1993 (in 1988 prices).[1]

The second contribution to the current debate stems more generally from reflections upon the link between the evolution of private markets and the establishment of new institutions. We define markets as sets of rules for the exchange of private goods, and institutions as organizations for the provision

*The paper was written while Alessandra Casella was a National Fellow at the Hoover Institution, whose hospitality and support are acknowledged with gratitude.

[1]For an up-to-date discussion of current and planned utilization of the Structural Funds, see Gordon (1991).

of public goods. If private economic decisions are influenced by public goods, as we expect them to be, then markets and institutions should develop together. What is happening in Western Europe may be more than a change in the scale of fiscal responsibilities sustained by the Community. As suggested by the movement towards a unique European currency, the shift to a single market may trigger a wider reorganization.[2]

We argue in this paper that Europe may be moving away from a static, hierarchical system of federalism, where government functions are ordered according to a pyramidal organization among jurisdictions, towards more flexible forms of cooperation. In particular, Europe may be approaching a system of 'functional federalism': a regime where individuals organize themselves in a pattern of overlapping jurisdictions without explicit ranking, with each jurisdiction responsible for the provision of a specific class of public goods. In this model, regions belonging to different states may form cooperative agreements without passing through the higher jurisdictional level. These agreements have variable membership, depending on the scope of the policy under consideration, and each single unit may therefore form treaties with different other units, in a highly decentralized system of intersecting alliances.[3]

The Community's explicit recognition of regional needs, beyond national identities,[4] the advocacy of 'multiple speeds' in achieving monetary unification, the extended membership to countries with widely divergent economies, the increasing pressure from Eastern Europe, all point to functional federalism as a likely and desirable development.

From a theoretical point of view, functional federalism emerges as a desirable government structure whether the question is seen from the perspective of public choice theory in political economy, or from the tenets of neoclassical public finance. The two approaches start from very different assumptions, and their convergence on a common conclusion is remarkable. The purpose of this paper is to review how such conclusion is reached in the two different lines of thought (sections 2 and 3), and to suggest some initial remarks on the empirical relevance of functional federalism (section 4).

2. The political theory of overlapping jurisdictions

The fundamental assumptions behind modern choice theory [for example, Buchanan and Tullock (1962) and Mueller (1989)] are remarkably similar to

[2]Two papers which stress this approach, with very different methodologies, are Schmitter (1991) and Casella and Feinstein (1990).

[3]The arrangement we have in mind is similar to the regime called 'condominio' in Schmitter (1991).

[4]See, for example, the reference to the role of regional associations in the preliminary draft of the Treaty of the European Union, presented by the Intergovernmental Conference on Political Union on 18 June, 1991.

those characterizing the political theory of federalism. In this section, we follow Ostrom (1971) in his interpretation of The Federalist, the collection of 85 essays written by Alexander Hamilton, James Madison, and John Jay in 1787–1788 as part of the debate upon the new Constitution of the United States.

As Ostrom remarks, in this tradition the problem of designing the optimal government is shaped by the acceptance of two basic assumptions: first, individuals are the sole possible unit of analysis. Governments draw their legitimacy directly from individuals, and must rule by enforcing laws upon individuals. Second, governments are required because individuals are self-interested, greedy and fallible. A peaceful and just society can only exist when individual passions are controlled.

Three implications follow immediately. First, since rulers must be able to exercise power, in any form of government there is inherent asymmetry between rulers and ruled. Since rulers too are human, self-interested and fallible, their power needs to be checked. Therefore, and this is the second observation, a good system of government will rely on 'ambition to counteract ambition' (Madison, Federalist 51), on a system of balances such that people with power are overseen constantly by other people with power. Finally, a majority system within a unitary government endangers the rights of the minority. The majority is again composed of individuals with all their weaknesses and desires. and its tyranny can be as ruthless and oppressive as any dictatorial regime.

The federal system is the solution to these obstacles, a 'compound republic', in Ostrom's beautiful terminology, where concurrent, independent, non-ranked governments are organized by different communities of interest, and where the probability that the same group dominates all jurisdictions becomes negligible. Hence the distinction between local and national interests, both democratically expressed in the appropriate jurisdiction. But more generally, from this basis emerges the view of a federal system of public administration as a complex of 'public-service industries': '. . . an education industry, a policy industry, a fire-protection industry, a trash and garbage disposal industry, a welfare industry, a health-services industry, . . .' [Ostrom (1971, p. 204)]. In this way only, by being able to choose among suppliers of public services without having to change their place of residence, individuals will be able to induce politicians to fulfil their preferences by credibly threatening exit.

3. Federalism and the theory of clubs in public finance[5]

In the neoclassical theory of public finance, the government is not the

[5]For excellent surveys of these topics, see Rubinfeld (1987), Scotchmer (1990), and Starrett (1988). Our exposition relies mostly on the last of these sources.

concrete bureaucracy that occupies political scientists, but a generic institution for collective decision making that provides the antithesis to the market. Its role stems from the existence of goods that cannot be efficiently allocated through private markets. These 'collective' goods must be such that property rights on them either cannot be enforced (for example, the fish in the sea), or should not and will not be enforced, because additional users in no way decrease the benefit derived from the good by the original consumers (for example, television programs). The first type of collective goods are called 'non-excludable'; the second 'non-rivalrous'.

If a collective good is non-excludable, its consumption must be the same for everybody in the economy. For our purposes, what matters is that by definition the provision of this type of public good cannot be decentralized, but must be decided for the entire area over which the public good is non-excludable.

Public goods that are excludable, but only partially rivalrous are at the center of the theory of clubs. The idea is simple: if the public good is excludable, then different independent groups may form, barring non-members from access to the public good [Buchanan (1965)]. This is the case for example with a swimming pool in a country club, or a library in a university, or indeed with many public goods provided within a political jurisdiction.

Suppose first that all agents have identical tastes and incomes, but that, as with a swimming pool or a library, additional members create congestion (that is, the good is partially rivalrous). Then the optimal size of the club is given by the condition that, in equilibrium, the cost of admitting an additional member must equal the average cost of providing the public good. This is an important reference point, because it implies that the club good could be financed by marginal cost pricing. In other words, the optimal size of the club is such that the collective good acquires the characteristics of a private good. An optimal division in clubs will be possible as long as the total number of consumers in the economy is (approximately) a multiple of the optimal club size.

The partition in clubs becomes more interesting when we allow for the possibility of heterogeneous consumers, differing either with respect to their endowments or with respect to their tastes. We can then ask two questions: First, will the efficient outcome imply segregation or mixing of types within each club? Second, will the consumers be able to implement such efficient outcome by sorting themselves optimally among the various clubs? The answer to the first question is intuitive, if possibly disturbing on political grounds: as long as there are sufficient members of each type to reach the correct club size, segregation is optimal. Accepting members with different preferences brings no benefit per se, and may entail a less preferred choice of the public good.[6]

The second question is the one proposed by Tiebout in a famous paper [Tiebout (1956)]. Tiebout speculated that as consumers in a market choose among goods on the basis of the goods' price and characteristics, so they can choose among jurisdictions by 'voting with their feet' and joining the community offering their preferred mix of taxes and public services. In a world of heterogeneous agents, they will be able not only to divide themselves optimally among the various clubs, but to force the clubs to compete for their membership, assuring that the public goods demanded will be provided at the lowest cost. Two requirements have been identified as essential for achieving the optimal outcome: first, consumers must be presented with a range of choices wide enough to include the optimal package for each type; second, there must be enough consumers of each type to form clubs of optimal size [see for example Bewley (1981) and Berglas (1982)]. As noted by Starrett (1988), the result is not too surprising: if clubs have efficient size, the club good can be financed through marginal cost pricing, and we would expect a market mechanism to work. However, the conditions required are severe, and while Tiebout's suggestion remains a challenging reference, its welfare promises cannot be fulfilled in general.

The economic theory of fiscal federalism suggests that decentralization of government's functions may be optimal. While some decisions are best left at the national, or even international level, many are best taken by local governments which are closer to the needs and preferences of the citizens. The link with our previous discusson is immediate: for some public goods, the optimal club size is the entire country, for others it is a narrower jurisdiction; a good political structure will be able to integrate the different levels of collective decision-making.

Starting with Musgrave (1959), and especially with Oates (1972), the debate has centered on the identification of the functions that should be allocated to the different levels. The results from the theory of clubs provide three general insights. First, all statements about optimal club size and segregation are in terms of Pareto optimality, and ignore questions of income distribution. Specific objectives for distribution, if they exist, must be implemented directly, presumably within the jurisdiction where such objectives are formulated. Second, as we said above, the administration of non-excludable public good should be centralized. This implies, for example, that environmental regulations should be coordinated at the wider possible level. Third, the optimal club size depends on the characteristics of the specific

[6]The results will not hold if the cost of a less preferred public good is compensated by other factors, for example if there are complementarities between consumers of different types.

public good we are discussing. A good example is the identification of optimal currency areas. If money is viewed mainly as a means of transactions, then it is a fully non-rivalrous collective good: more people using the same currency increase the benefits to the original users. In this case, the optimal club size is as large as possible. However, if money is viewed as a source of budget finance, or as a tool for stabilization, then the optimal size of the monetary club is given by the requirement that preferences over the use of money be somewhat homogeneous within the club.[7] These two alternative views of the question are at the core of the debate on European monetary unification.

But if the optimal club size depends on the specific public good, then all consumers in a theoretical model should be divided in a complex system of overlapping jurisdictions. Each agent will belong to different groups, depending on the issue: a group for cultural affairs, and one for transportation, one for school programs and one for social security, one for health care and one for telecommunications. Functional federalism is the natural implication.

4. Concluding remarks on the empirical relevance of functional federalism

Ignoring administration costs and economies of scale in the production of different goods, the number of clubs could be very high, possibly coinciding with the number of public goods. The daunting task of organizing and managing a system of this type has led economists to dismiss its significance. While we do not want to minimize the obvious difficulties, two observations seem in order.

First, the emergence of special local governments devoted to a single issue, and often cutting across traditional jurisdictional lines, is a common and increasing occurrence in most economies. It responds to new needs created by migration or trade, and not served adequately by the pre-existent division in jurisdictions. An example are 'special districts' in the United States, typically addressing the needs of metropolitan areas that have grown across state or country borders (for instance, the Port Authority in New York City, serving parts of New York and of New Jersey is a special district). In the U.S., special districts have risen from 18,323 in 1962 to 29,532 in 1987 (ignoring school districts), while other local governments have remained approximately constant.[8] There are now almost twice as many special districts as there are towns. While the increase is often deplored as a source of duplication of services, no mention is made of the obvious fact that traditional legal subdivisions have become obsolete.

In Switzerland, as a second, European example, the institutions of

[7]We are assuming that inflation is an excludable public 'bad'.
[8]Statistical Abstract of the United States (1990).

functional federalism are widely used both among and within cantons. Functional units (in Germany *Zweckverbände*) are created to provide water, electricity, gas, garbage collection, fire brigades, homes for the aged, etc. As a specific case, the canton of Thurgau, in North-East Switzerland and with a population of only about 250,000, had 442 such units in 1987. Individual citizens normally belong to dozens of different clubs, and take active parts in their management through assembly meetings, drafting of initiatives and referenda. Groups of citizens may also create their own functional units when they believe they can provide a particular service more efficiently than currently available.

It may be argued, of course, that these examples are special. Our goal is to emphasize that even if an entire political system could not be organized solely through uni-dimensional clubs, still the role of these clubs should not be undervalued.

Our second observation is of a different nature. If clubs providing different public goods are merged to exploit economies of scale, still there is little reason to expect that the theoretical result will replicate the hierarchical, nested federalism we are most used to. Reducing the number of jurisdictions does not guarantee that their borders will not cross. An interesting example where economic forces are bringing an overlap of borders within our current political order is the question of local suffrage of non-citizens workers. Within the European Community, Ireland, Denmark and the Netherlands have extended the right to vote in local elections to all residents, whether citizens or not.[9] This implies that an Italian worker in Copenhagen votes in Denmark with his neighbours on local issues, but in Italy with Italian citizens on national elections. Once again, the administrative innovation is responding to needs created by economic change, as more open labor markets allow workers to move repeatedly across countries and require institutions responsive to the voice of non-assimilated, possibly transitory tax payers. At the same time, the evolution suggests that our concept of borders, our identification with a nation state, our view of federalism in Europe may soon need to change more deeply than we have been ready to acknowledge.

[9]For a summary of political rights of immigrants in the E.C., see Reuter (1990).

References

Berglas, E., 1982, User charges, local public services, and taxation of land rents, Public Finance 37, 178–188.

Bewley, T., 1981, A critique of Tiebout's theory of local public expenditures, Econometrica 49, 713–740.

Buchanan, J.M., 1965, An economic theory of clubs, Economica 32, 1–14.

Buchanan, J.M. and G. Tullock, 1962, The calculus of consent (University of Michigan Press, Ann Arbor).

Casella, A. and J. Feinstein, 1990, On the formation of markets and political jurisdictions, NBER Working paper no. 3554, Dec.
Gordon, J., 1991, Structural funds and the 1992 program in the European Community, IMF Working paper, June.
Hamilton, A., J. Madison and J. Jay, 1987, The federalist papers (Penguin Books, London).
Mueller, D.C., 1989, Public choice II (Cambridge University Press, Cambridge).
Musgrave, R., 1959, The theory of public finance (McGraw-Hill, New York).
Oates, W., 1972, Fiscal federalism (Harcourt Brace, New York).
Ostrom, V., 1987, The political theory of a compound republic (University of Nebraska Press, Lincoln).
Reuter, L., 1990, Political participation of immigrants in the European Community and the current suffrage debate, Paper presented at the Seventh Conference of Europeanists, 23–25 March, 1990.
Rubinfeld, D., 1987, The economics of the local public sector, in: A. Auerbach and M. Feldstein, eds., Handbook of public economics, Vol. II (North-Holland, Amsterdam) 571–646.
Schmitter, P., 1991, The European Community as an emergent and novel form of political domination, Mimeo., June (Stanford University).
Scotchmer, S., 1990, Public goods and the invisible hand, Mimeo., April (U.C. Berkeley).
Starret, D., 1988, Foundations of public economics (Cambridge University Press, Cambridge).
Tiebout, C., 1956, A pure theory of local expenditures, Journal of Political Economy 64, 416–424.
van Rompuy, P., F. Abraham and D. Heremans, 1990, Economic federalism and the E.M.U., Mimeo., March (University of Leuven).