**Chapter 26**

**Optimal Federalism: Sorting the Functions of Government within the Fiscal Hierarchy**

1. Federalism

a. A hierarchical structure of governments in which each person is, simultaneously, a citizen of more than one government

1). Federal, state, local governments in the U.S.

b. Brings the issues of potential incompatibilities and competition problems into public sector theory

1). Incompatibilities: e.g. the national government wants to transfer income from person 1 to person 2; the state government where the two people live wants to do exactly the opposite

2). Competition among lower-level governments with mobile population

--People can "vote with their feet" if they do not like a state or local government's policies

--e.g., if wealthy residents of town A are asked to provide social services to the poor, they may well move to some other town, B, which has no such policy

-- governments within a given level of the fiscal hierarchy forced into a competition with one another to attract and retain residents

--a stable equilibrium is not assured given mobility

2. Two fundamental sorting questions of fiscal federalism

a. Which governments should provide the various legitimate allocational and distributional functions of government?

1). Goal is to avoid potential incompatibilities and destructive competitions among the governments and achieve a social welfare maximum

b. How must people sort themselves among the various jurisdictions?

1). Goal: avoid incompatibilities and intergovernmental competitions and achieve a social welfare maximum

c. Social welfare within federalism

1). Natural extension of single government model: each autonomous government formulates its own distinct social welfare function that it attempts to maximize

--also gives each government a political identity in mainstream public sector theory

2). But usual approach is to allow only the national government to have a social welfare function

--only national government concerned with distribution question

3. The sorting of functions within the fiscal hierarchy

a. Economists typically adopt first-best framework on this question to separate allocation and distribution issues

b. A fundamental question with usual approach

1). National government assumed to have social welfare function and maximize it

2). Solves



where: h = 1, . . . , H includes everyone in the society

F() is the aggregate production-possibilities frontier

3). If national government can solve this problem, why do lower level government need to do anything?

c. Stigler's widely adopted answer to sorting question, based on two assumptions

1). A1: representative government works best the closer the government is to its constituency

2). A2: people within a country have the right to vote different kinds and amounts of public services for themselves

3). Conclusion: decision-making should occur at the lowest level of government consistent with the goals of allocational efficiency and distributional equity

--believed national government best for resolving distribution question

-- responsibility for allocational functions depends on the geographic scope of both externalities and decreasing costs

d. Oates perfect correspondence principle

1). Ideal fiscal federalism would have a perfect correspondence geographically between the jurisdiction over each allocation issue and the scope of people affected by the issue

2). Generates economic efficiency

e. Question remains why national government cannot supply goods efficiently

f. One answer: Oates' decentralization theorem

1). Two groups A and B have preferences over two goods X and Y

--both goods private but Y publicly provided

2). Preferences identical within groups, differ across groups

3). Distribution of income optimal; social welfare optimum equivalent to the efficient pareto optimum



4). FOC



--In general, XA ≠ XB and YA ≠ YB at optimum

--Makes no difference whether national or local provision

5). Suppose national government has to provide same amount of Y to both groups

6). FOC



where:

--λ2 = the Lagrangian multiplier associated with society’s production possibilities, F( ) = 0

-- λ3 = the Lagrangian multiplier associated with the new constraint, YA = YB

7). Lowers overall welfare since adds another constraint to the problem

g. Misperceived preferences in spirit of Stigler's first assumption

1). Assume existence of a nonexclusive good g affecting only subset of the population h = 1, . . . , k, who live in one jurisdiction

2). FOC is ; with good 1 a purely private good

3). Local government knows any individual’s with perfect certainty



4). National government knows the individual MRS's only with an error



-- = the true MRS as observed by the local jurisdiction.



--α = a random variable, with E(α) = , possibly 0.



5). national government determines X*g* according to the first-order condition:



6). Even if  an unbiased estimate of a risk-averse society would prefer local provision of Xg



7). In terms of indirect utility function



where:

= the optimal level of Xg, with local provision.



with E(β) = 0, obtained with national provision.



-- persons h = 1, . . . , k would be willing to pay a risk premium for local rather than national provision of Xg

h. Oates' Decentralization Theorem, misperceived preferences justify local autonomy by means of second-best restrictions

1). Cannot justify local autonomy in first-best environment by ceding distribution function to national government

4. Optimal federalism and the distribution function

a. Federalist system requires local redistributions to have meaning as an optimal fiscal system from the mainstream perspective

b. Perceived difficulties with local redistributions

1). With mobility, rich move to avoid redistributing to poor; "the competition problem"

--mobility itself generates inefficiencies (discussed in Chapter 27)

2). Without mobility, potential incompatibilities among levels of governments

--almost certain to arise if each government has own individualistic social welfare function

3). Oates ideal two–part prescription to avoid local redistributions

--local governments engage only in allocational activities

--finance all local public expenditures with benefits-received taxes which are neutral distributionally; e.g., Lindahl prices for nonexclusive goods

4). If there is also Oates' perfect correspondence, no need for grants-in-aid among governments

c. Criticisms of the prevailing model

1). Decreasing cost services

--benefits-received taxation covers only marginal cost price

--in single government model, deficit becomes part of tax/transfers satisfying IE conditions

-- not available to local governments; no theoretical guideline to finance the deficit

--local governments could use two-part tariff: p=MC and a one- time fee to use service equal to all; no justification for that particular fee

--national government implicitly involved since it settles distribution question

2). Without a social welfare function, local governments have no political identity; merely agents

3). If national government can satisfy the interpersonal equity conditions



it knows enough to achieve pareto-optimal solutions within each locality 4). Local governments do care about distribution

--Original U.S. public assistance programs were administered by state and/or local governments; Medicaid and TANF still are

--distributional preferences differ across states, localities

d. An alternative model with social welfare functions for all governments

1). All governments must have social welfare functions

--no identity without one

-- social welfare maximization by each government is the only acceptable meaning of an overall first-best social optimum

2). Each government cannot have a standard individualistic social welfare function defined over its own citizens because of potential incompatibilities

3). Need some restriction on form of social welfare functions

4). Standard model imposes restriction that only national government can have a social welfare function

5). Imposing a dynastic set of social welfare functions is the more natural restriction for a federalist system; for U.S.:

--lowest level governments have standard individualistic social welfare functions defined over their own citizens

--each state government has social welfare function whose arguments are the social welfare functions of its localities

--national government has social welfare function whose arguments are the social welfare functions of the state governments

6). Consider two-tiered federalist system for simplicity

7). Local governments

Let:

-- be the utility function of person h living in locality 1.

h = 1, . . . , H

1 = 1, . . . , L

with  the kth good consumed by person h living in locality 1, for k = 1, . . . , N

-- be the social welfare function of locality 1, whose arguments contain the utility functions of all persons (or potential persons) living in locality 1

8). National government social welfare function



9). Every government engaged in lump-sum redistributions to satisfy IE conditions for social welfare maximum

10). IE conditions

--Local governments



--National government



11). Local governments tax and transfer lump-sum among their citizens in the usual manner

12). National government taxes and transfers lump sum among the localities

--as national government redistributes, localities adjust their taxes, transfers to maintain their IE conditions

e. Advantages of alternative model

1). All governments have a political identity

2). Avoid incompatibility and competition problems

--if rich try to avoid local redistribution by moving in with other rich, state government redistributes from rich to poor localities; incentive for rich to move ends

3). Clear sense of what social welfare maximization means throughout the fiscal hierarchy in a first-best environment

4). Grants-in-aid have a central role to play in distribution policy, as they do in reality

5). U.S. follows both standard and alternative model in its redistributive policies

--national-government-only redistribution: SNAP (food stamps), EITC, Social Security

--national/state /((sometimes)Local redistribution: Medicaid, TANF; higher percentage of U.S. financing the poorer the state

f. Caveat: Nothing can preserve complete local autonomy with perfect (costless) mobility

1). Horizontal equity the long-run equilibrium condition

2). All governments must accept same degree of inequality (vertical equity) if they contain people from all the income classes

3). In alternative model, local distributional preferences still matter in determining what the final degree of inequality will be