Chapter 10: State and Local Government Expenditures

Optimal fiscal federalism is the question of which activities should take place at which level of government.

Outline:
- Tiebout model
- What public goods should local governments perform, and which are best left for the central government?
- Intergovernmental grants
- A problem

The largest element of state and local spending is education, followed by health care and public safety. The largest elements of federal spending are health care, Social Security, and national defense.

The major source of revenue at the state and local level is the property tax, the tax on land and any building on it.

Property taxes raised $253 billion in revenue in 2001, and accounted for almost one-half of the non-grant revenues of local governments.

What is the optimal division of responsibilities across different levels of government?
- A theory of how the efficiency of public goods provision may differ at different levels of government helps answer this question.

Recall that two of the major problems in public goods provision are:
- Preference revelation: Difficult to design democratic institutions to cause individuals to reveal their preferences honestly.
- Preference aggregation: Difficult to aggregate individual preferences into a social decision.

Tiebout (1956) showed that the inefficiency in public goods provision came from two missing factors: shopping and competition.

Shopping induces efficiency in private markets.

Competition induces the right prices and quantities in private markets.

With public goods provided at the local level, competition naturally arises because individuals can vote with their feet by moving to another town without much disruption.

This induces fiscal discipline for local governments and creates a new preference revelation device: mobility.

Tiebout argued that the threat of exit can induce efficiency in local public goods production.

Under certain very strong conditions public goods provision will be fully efficient at the local level.

The Tiebout Model
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- Tiebout's formal model assumes the following:
  - Large number of individuals, who divide themselves up across towns that provide different levels of public goods.
  - Town $i$ has $N_i$ residents who all demand $G_i$ of the public good.
  - Uniform tax of $G_i/N_i$.

- Tiebout's model solves two problems:
  - Preference revelation: There is no incentive to lie. With a uniform tax on all residents, the consumer saves $1/N_i$ in tax but receives $1/N_i$ less of the public good.
  - Preference aggregation is solved because everyone in the town wants the same level of public goods, $G_i$.

Problems with the Tiebout Model:

- **Tiebout Competition**
  - Tiebout competition may not hold because:
    - It requires perfect mobility.
    - It requires perfect information on the benefits individuals receive and the taxes they pay.
    - It requires enough choice of towns so that individuals can find the right levels of public goods.

- **Tiebout Financing**
  - Tiebout financing is problematic because:
    - It requires *lump-sum taxes* that are independent of a person's income. This is viewed as highly inequitable.
    - It is more common for towns to finance public goods through proportional taxes on homes, leading to the problem of the poor chasing the rich.
      - Cities and towns use zoning, partly in response to these pressures.
    - Zoning regulations in some cases maintain the tax base of wealthy towns by pricing lower income individuals out of the housing market.
      - For example, a town that prohibits multifamily dwelling such as apartments lowers the available amount of housing, and thus inflates the value of existing housing, keeping the poor out.

- **Externalities or “Spillovers”**
  - Tiebout model is also problematic because of the assumption of no externalities or spillovers:
    - Model assumes public goods only have effects in a given town, and that they do not spill over to neighboring towns.
    - Some public goods, like a public park, probably violate this assumption.
Evidence on the Tiebout Model

- Even given the problems of the Tiebout model the basic intuition that individuals vote with their feet is still a strong one. Two types of tests reveal this:
  - Resident similarity
    - A clear prediction of the Tiebout model is that residents in a local community will have similar preferences for local public goods.
    - The more local communities and choices, the more residents can sort themselves into similar groupings.
    - Gramlich and Rubenfeld (1982) found greater sorting in larger metropolitan areas (where mobility costs would be smaller), and greater satisfaction with public goods provision.
  - Capitalization
    - Differences in fiscal attractiveness appear to be capitalized into house prices.

Optimal Fiscal Federalism: Tax-Benefit Linkages

- The Tiebout model implies that the extent to which public goods should be provided at the local level is determined by tax-benefit linkages.
  - Strong linkages (such as local roads) means most residents benefit, and the good should be provided locally.
  - Weak linkages (such as welfare payments) means that most residents do not benefit, and the good should be provided at a higher level.
- If residents can see directly the benefits they are buying with their property tax dollars, they will be willing to pay local taxes. Otherwise, they may “vote with their feet.”

Optimal Fiscal Federalism: Are There Externalities?

- The second factor that determines the optimal level of decentralization is the extent of positive externalities.
- If the local public good has spillovers to other communities, they will be underprovided. In this case, higher levels of government have a role in promoting the provision of these public goods.

Optimal Fiscal Federalism: Economies of Scale in Production

- The third factor that determines the optimal level of decentralization is the economies of scale in production.
  - Public goods with large economies of scale, like national defense, are not efficiently provided by many competing local jurisdictions.
  - Public goods without large economies of scale, like police protection, may be provided more efficiently in Tiebout competition.
    - The Tiebout model, therefore, predicts that local spending should focus on broad-based programs with few externalities and relatively low economies of scale.
    - Examples include road repair, education, garbage collection, and street cleaning.
**REDISTRIBUTION ACROSS COMMUNITIES**

- The Tiebout model allows us to consider one of the most important problems in fiscal federalism: Should there be redistribution of public funds across communities?
- There is currently enormous inequality in the ability and perhaps desire for communities to finance public goods.
- Gaps in per-pupil spending, for example, arise because of differences in the local property tax rate and, more importantly, from differences in property values.
  - Should higher levels of government mandate redistribution across lower levels to offset these differences in spending?
  - In a perfect Tiebout world, communities would have formed for the efficient level of public goods, and redistribution would impede that efficiency.

**Tools of Redistribution: Grants**

- When higher levels of government redistribute, they do so through *grants*—cash transfers from one level of government to another.
- Between 1960 and 2003, grants to lower levels of government grew from 7.6% to 17.9% of federal spending.
- Higher levels of government tend to use 3 types of grants:
  - **Matching grants**—which ties the amount of funds transferred to the community to the amount of spending it currently allocates to public goods.
  - **Block grants**—a fixed amount of money with no mandate on how it is to be spent.
  - **Conditional block grants**—a fixed amount of money with a mandate that it be spent in a particular way.

**Should We Care About Income Disparities Across Communities?**

- To the extent that Tiebout does not perfectly describe reality, however, there are two arguments for redistribution.
  - The first is failures of the Tiebout mechanism. For example, even if one desires to be in a high benefit community, a household may be priced out of it by zoning restrictions, etc.
  - The second is *externalities*. It is possible that local public goods, like education, have spillovers to other communities.

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![Figure 2](image_url)

**Figure 2: The effects of different government grants**

- Such a grant acts as an income effect, but keeps the price ratio at 1 rather than ½.
- A one-for-one "matching grant" changes the price of education and the price ratio to ½.
- Such a grant allows other choices, and utility is higher at IC₃, which entails less education.
- A block grant also allows other choices, and utility is higher at IC₄ over public and private goods. They choose $500,000 of education.
The flypaper effect

As shown in Figure 2, block grants are simply income increases to communities if they are either unconditional or conditional but below the city’s desired spending on the public good.

The city should therefore reduce its own spending, a type of crowding out, so that spending on the public good goes up by only a fraction of the total grant amount.

However, the flypaper effect suggests there may be little crowd out: “money sticks where it hits.”

The empirical evidence on the flypaper effect is mixed. The most recent studies suggest the analysis in Figure 2 likely holds.