Encyclopedia of Education Economics & Finance

Tiebout Sorting

Tiebout sorting refers to the sorting of households into neighborhoods and communities according to their willingness and ability to pay for local public goods (tax-supported amenities and services—such as K-12 education—provided to residents of a local jurisdiction). In theory, sorting results in an efficient provision of public goods as local governments compete to provide desired services at a price residents are willing to pay (via housing costs and property taxes), and households choose communities that fit their preferences for public services, housing, and taxes. This entry introduces the economist Charles Tiebout's hypothesis about the effects of residential sorting and its implications for policy. It lays out key assumptions and predictions of the theory and highlights recent empirical tests of these. It concludes by describing how recent education policies do and do not promote Tiebout "effects."

The term itself refers to Tiebout's seminal 1956 paper, which challenged the conventional view in economics that individuals will not voluntarily reveal their preferences for public goods, leading to an underprovision of those goods in the free market (known as the "free rider problem"). Tiebout argued that a system of local governments and property taxes creates a "market" for local public goods, as households with similar tastes and abilities to pay for these goods choose to locate in the same communities. Households effectively reveal their preferences through mobility, or by "voting with their feet."

Implications of Tiebout Sorting for the Economics of Education

Tiebout's hypothesis has a number of implications for the provision of public goods such as education. First, local governments have an incentive to provide residents' desired quantity and quality of services at the least cost, as failure to do so would lead to a loss of residents (and their tax dollars) to other communities. Second, local provision results in a better match between households and public goods expenditures than would arise under a centralized system. Third, households will stratify across communities according to tastes and ability to pay for public services, resulting in the segregation by characteristics associated with demand (e.g., income, socioeconomic status, and

number of children). Fourth, there will be as much inequality in expenditures on public goods as there is variation in tastes and willingness to pay for them. Fifth, when the local supply of housing is fixed, the quantity and quality of public services (and their tax cost) will be capitalized into housing prices. Sixth, because of the link between taxes, public service quality, and property values, homeowners have a strong incentive to monitor the performance and productivity of their local governments.

The Tiebout model has been instrumental in helping public finance and education economists analyze local government productivity and the optimal provision of public goods. On the one hand, sorting has the potential to encourage competition between districts, incentivize quality, and minimize costs. On the other hand, a purely local system of public education can be highly unequal, with spending and quality functions of local income, property wealth, and tastes. The model illustrates an efficiency-equity trade-off in which the beneficial effects of Tiebout sorting are weighed against its unequal distribution of services and segregating effects. Distribution becomes increasingly relevant in the presence of "interjurisdictional spillovers"—that is, when the provision of a public good in one community affects the well-being of another. Education arguably exhibits these spillovers, as citizens have an interest in the **[p. 787 ↓]** education of others in their broader labor market area, state, or nation.

Assumptions and Tests of the Tiebout Model

Tiebout's model relies on strict assumptions that even he acknowledged were unrealistic. These assumptions, however, may hold to an approximation in some contexts and are often used as a benchmark against which real-world settings are compared. For example, a key condition for Tiebout sorting is a large number of jurisdictions from which households choose. This assumption is more likely to hold in metropolitan areas than in large cities or rural towns. In the same way, one might expect to see greater Tiebout sorting (and effects) in states like New Jersey, which has 590 local school districts, than in Florida, which has only 67. Even large jurisdictions experience a form of Tiebout sorting, as households sort into neighborhoods within communities that satisfy their demands for public services.

Other assumptions of the model include the absence of constraints on residential choice (e.g., moving/commuting costs or employment) and perfect information about the quality and cost of public services. Again, neither assumption is strictly realistic, but research finds that households do consider public goods—such as the quality of local schools— when making residential choices. A number of careful empirical studies have found that housing units vary in market value according to differences in nearby school quality and property taxes. For example, in a well-known study, Sandra Black compared housing prices across attendance boundaries within the same school district and found that parents were willing to pay 2.5% more for 5% higher average test scores. Such behavior is prima facie evidence that Tiebout sorting exists.

The competitive effects of sorting were examined in a prominent study by Caroline Hoxby, who compared test outcomes and expenditures across school districts that— for historical reasons—were exposed to varying amounts of "Tiebout competition." She found that students in districts where the conditions for Tiebout sorting were greatest had better outcomes per dollar of expenditure (indicating greater productivity/efficiency) than those in districts facing less sorting pressure.

Conclusion

Over time, public education in the United States has moved away from Tiebout's vision of local public good provision and toward greater centralization at the state level. While this shift has resulted in greater resource equity, Tiebout's model predicts a corresponding loss of efficiency. Equalization can raise dissatisfaction with the level of spending and reduce overall support for public education (perhaps increasing private school enrollment); additionally, quality and productivity may suffer as incentives for investing in and monitoring public schools are diminished. One of the arguments for recent educational reforms such as intradistrict choice and school accountability is that these initiatives restore some of the competitive pressures offered by Tiebout sorting but lost under centralized provision.

See also Median Voter Model; Property Taxes; Public Choice Economics

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Further Readings

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