

## Partial Fiscal Decentralization and Public-Sector Heterogeneity: Theory and Evidence from Norway

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#### **Executive Summary**

# Partial Fiscal Decentralization and Public-Sector Heterogeneity: Theory and Evidence from Norway

With fiscal decentralization, local governments gain autonomy in the provision and financing of public goods. While local autonomy in fiscal matters has been a longtime feature in the United States, Canada and a few other countries, a greater degree of central management is common elsewhere, especially in developing countries. However, partly in response to advice from the World Bank and other international agencies, many of these countries are now embracing fiscal decentralization by attempting to devolve spending and taxing authority to local governments. This movement is motivated in part by economic theory, which supports the idea that local control of spending allows the public sector to better respond to differing demands for public goods among localities. Despite these developments, the fiscal decentralization pursued in other parts of the world often fails to match the North American pattern, being only partial in nature. Rather than gaining autonomy to set both spending and taxes, local governments often must rely on transfers from the central government to finance the provision of public goods. With fixed transfers, local governments often have little latitude in choosing the levels of public goods, especially when transfers are accompanied by mandates that specify how the money is to be allocated across spending categories. This form of "partial" fiscal decentralization, while prevalent in much of the world, has received only limited treatment in the public economics literature.

In this study, Borge, Brueckner and Rattsø offer a simple new model that compares public-good provision under full decentralization, partial decentralization, and centralization. The model predicts that as decentralization occurs, there will be less uniformity in the level of public goods between localities, and that local demand factors will be more influential in determining the final mix. After presenting the theoretical model, the accuracy of the model's predictions are tested using a "natural" experiment. The experiment is based on a change in Norwegian policy that introduced partial fiscal decentralization in a formerly centralized regime.

### **Analysis**

A simple model is presented where individuals consume two public goods and one private good. Two consumer types exist in the economy, each with its own unique preferences for public and private goods. The economy consists of a number of local jurisdictions with decisions on public-good levels made by majority voting in situations where local control is allowed. Thus, each locality prefers one of two possible mixes of public and private goods. The model is then used to compare public-good levels under three degrees of fiscal decentralization. These three degrees are: (1) full decentralization: public-good choices are made locally and spending is financed through local taxation; (2) partial decentralization: public-good levels are determined locally and spending is financed by a grant from the central government; (3) centralization: public-good levels are dictated by the central government and spending is financed by a grant from the central government.

The model predicts that fiscal decentralization (particularly the move from centralization to partial decentralization) results in differences between localities in their choices of public-good levels by allowing the provision of public goods to respond to the demands of each locality.

To test the accuracy of these theoretical predictions, a type of natural experiment is used. The test focuses on the effects of a 1986 reform in the control and financing of the Norwegian local public sector. The reform relaxed spending mandates for individual public goods, allowing new local discretion in the choice of the public-good mix while maintaining the system of financial transfers from the central government for support of local expenditures – a move from centralization to partial fiscal decentralization. The dataset covers 443 municipalities in Norway during the period 1980-1991. The analysis compares the 1980-1985 pre-reform period to the 1986-1991 post-reform period using data for three social-service sectors: child care, primary and secondary education, and parks and cultural services. A set of 'demand' variables measures the varying levels of demand for public goods across the municipalities. The key demand variable is per-capita income; we would expect a municipality with higher per-capita income to exhibit greater demand for all public goods. Other demand variables include demographic characteristics, such as the shares of the population in certain age categories; we would expect, for example, that a municipality with a higher share of young children would exhibit greater demand for child-care services. For test results to be considered favorable to the theoretical predictions, we should observe the following:

- Differences between municipalities in the provision of these public goods should increase in the post-reform period relative to the pre-reform period.
- Demand variables should be more highly correlated with public-good expenditures in the post-reform period compared to the pre-reform period. That is, using per-capita income as an example, since municipalities with higher per-capita incomes presumably demand more public goods than lower income municipalities, we expect to see relatively higher spending on public goods in the post-reform period by municipalities with higher per-capita income.

### **Results**

- There is increased variation between municipalities in the provision of primary/secondary education and in cultural spending in the post-reform years.
   Variation in the provision of child care appears to go down somewhat. Overall, the authors interpret these results as being somewhat supportive of the theoretical prediction that differences in public-good levels between municipalities should increase with fiscal decentralization.
- As a group, demand variables are more highly correlated with local levels of public-good provision in post-reform years compared to pre-reform years. In particular, the key percapita income variable, which never has an effect on public-service provision prior to the reform, emerges after the reform as a determinant of child-care coverage and employment per young child, teachers per student, and cultural spending. In addition,

larger cohort sizes (for children, youth, and elderly) lead to reductions in post-reform levels for some services, while these effects were absent prior to the reform. The authors interpret these results as supporting the theoretical prediction that local discretion granted under partial decentralization allows public-service levels to respond to local demand.

### **Policy Implications**

The study has simple policy implications. In particular, the results show that fiscal decentralization generates benefits by allowing public-good levels to be adjusted to suit local demands. Fiscal decentralization thus increases the extent of "consumer sovereignty" in public-sector outcomes by ensuring that public goods and services better match what consumers want. The paper's results therefore confirm the wisdom of the worldwide movement toward greater fiscal decentralization.