

# Regionalism, Federalism, and Taxation

## A Food and Farm Perspective

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### Introduction

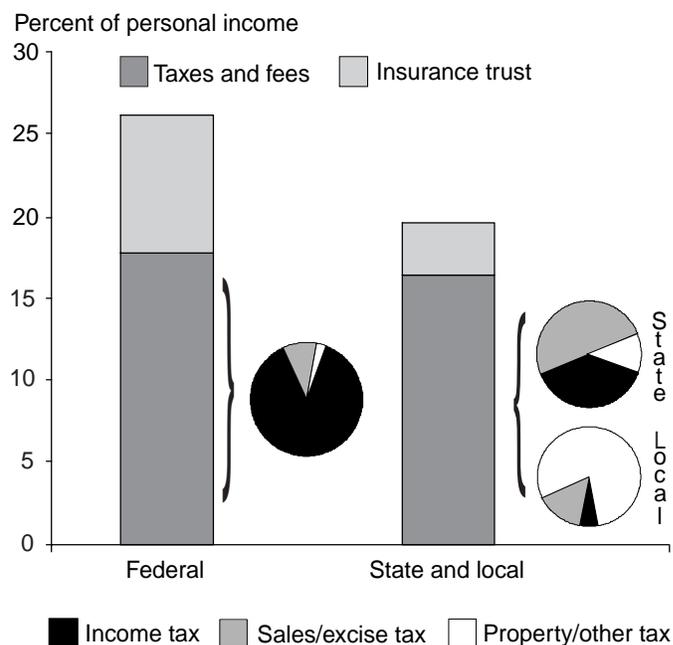
With no public policy having more profound effects on markets than taxation, the Economic Research Service has developed an adaptation of the prevailing economywide modeling framework used for examining tax policies. This adaptation makes prominent, salient features of food and farm industries and their markets, features generally obscured in applied economywide tax models. A characteristic of food markets is the geographic fixity of primary factors in production, including suitable farmland, regional climate conditions, natural resource base, and proximity to primary upstream industry. These geographic elements motivate the modeling assumptions employed in the model that we present.

In the United States, the tax and social insurance systems are multilayered. They include a central Federal, State, and local tax and insurance trust systems. Combined Federal and State taxes, charges, and miscellaneous fees are estimated at 34.1 percent of personal income in 1994. In addition, the Federal and State insurance trust collections amounted to 11.4 percent of personal income (fig. 1). The most extensive source of revenues at the Federal level is the income tax, at 90 percent of total tax revenues and nearly 40 percent of total revenue. The Federal insurance trust (primarily social security and medicare) produces one-third of all Federal revenues. Among State governments, taxes account for more than 70 percent of own-source general revenues (taxes plus insurance trust). Income and wealth taxes are a smaller share of State tax revenues, around 40 percent, while roughly half of State tax revenues are raised through sales and excise taxes. Three-quarters of local tax revenues come from annual property taxation. There are no annual Federal

property taxes, and under 10 percent of Federal taxes are sales and excise taxes. At 12 percent, the State insurance trust (mostly employee retirement) is not as significant a revenue source as in the Federal budget.

Reform of the tax system, to address inefficiencies it creates, has always been part of the national economic policy debate. By “inefficiencies,” we are referring to the alterations in relative prices for factors of production and consumption caused by a tax system that creates unequal burdens on different factors. The Federal tax system was reformed, in various degrees, in 1986, 1993, and 1997. Currently, there are proposals for fundamental

Figure 1  
**Disposition of public revenues, 1994**



Source: American Council on Intergovernmental Relations.

change in the tax system. In this report, we document a model developed to assess the economic effects of taxation reform in the United States, and we simulate a generic tax reform to illustrate its multiple effects on economic performance in different regions. While the model is economywide, we give special attention to regional economies, food and farm industries, and the food consumer.

There are significant regional dimensions to tax policy initiatives, and region-specific policies are likely to have significant effects in other regions. Prominent features of our work include the explicit treatment of local, State, and Federal taxes and the existence of several subnational regions that engage in inter- and intraregional trade, as well as in international trade. We use a multiregional, applied general equilibrium model of the U.S. economy. Each region is distinguished by its unique composition of industries, disposition of capital factor markets, and patterns of both intra- and interregional trade. These characteristics create a unique relationship in each region with the tax system.

We seek to represent the multiple inefficiencies in each economic region in the tax system, stemming from the differential treatment of primary factors of production. We represent the distortionary effects on industry capital, as well as the capital/labor decisions, taking into account that industry employs

a heterogeneous capital portfolio.<sup>1</sup> Within each region, misallocations of primary factors across industry aggregates are also represented, and while intersector mobility between corporate, noncorporate, and residential capital is precluded, the tax treatment of each sector is captured and will affect resource allocation decisions. Similarly, financial characteristics of each industry and across industry aggregates are represented exogenously, along with macroeconomic assumptions such as real interest rates and inflation expectations. These factors affect tax incidence in capital factor markets.

At the household level, the allocation of income between present and future consumption is represented, and the tax system affects this decision through the differential tax treatment of consumption and savings in each regional household, the latter stemming from the tax treatment of investment goods. While tax policy can affect labor supply decisions, we hold fixed each region's supply of labor, and thus ignore any such supply response.

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<sup>1</sup>Because the model represents the intermediate-run scenario, the industry-level decisions, such as capital portfolios and labor/capital ratios do not translate to the regional totals, since each labor and capital aggregate is fixed within each region. The longrun results are foreshadowed in the model by tracking the international investment flows (see the "Macroeconomic Closure" subsection).