

METHODOLOGY

This study generally follows the methodology used by Dr. Edward W. (Ned) Hill in his 2001 study, *Ohio's Competitive Advantage: Manufacturing Productivity*, which was sponsored by the Ohio Manufacturers' Association.¹ Hill relied especially on a 1992 study by Michael Sobul of the Ohio Department of Taxation, who estimated the business share at 32.4 percent at that time. Sobul and Hill each also considered prior estimates by the Advisory Commission on Intergovernmental Relations and the consulting firm of Levin & Driscoll.

Policy Matters Ohio updated previous estimates where that was needed, or produced new ones in cases such as the kilowatt hour tax, which did not exist at the time of the earlier studies. Collections for fiscal 2002 were used for most taxes, primarily those collected at the state level, and data for calendar 2002 for most others. Total annual collections of \$35 billion mean that a 1 percent share amounts to \$350 million. Thus, while assumptions made in estimation and the availability of data mean the exact shares of business and individuals cannot be tallied to the dollar, the overall conclusions are accurate.

Some taxes have been assigned entirely to business or individuals. The following explains the methodology followed in those taxes that have been allocated in part to both:

Public Utility Excise Tax – This tax is divided between business and individuals based on usage. In tax year 2002, 98.9 percent of taxes levied came from natural gas or local telephone companies (Phone companies will no longer be covered by this tax after the 2004 tax year, but were as of years covered by this study). The Public Utilities Commission of Ohio provided figures on natural gas consumption for 2003. Business accounted for 52.7 percent of usage. According to the 2002/2003 Edition of the Federal Communications Commission's *Statistics of Communications Common Carriers*, 31.9 percent of the telephone access lines sold by incumbent carriers were used by businesses. Based on 45.8 percent and 53.1 percent shares of this tax levied in Tax Year 2002 on telephone and natural gas companies, respectively, this resulted in 43.1 percent of the overall tax being allocated to business.

Insurance Taxes – This is a gross premium tax built into the price of the premiums. Thus, these taxes are allocated based on who pays the premium. According to the Insurance Information Institute 2004 fact book, 52.4 percent of the net property and casualty insurance premiums written in 2002 were for commercial lines designed for business. Some \$16.9 billion in direct premiums were written in Ohio. The American Council of Life Insurers *Life Insurers Fact Book 2003* reports Ohio premium receipts in 2002 of nearly \$21.2 billion. Based on the breakdown of life-insurance policies in force that year between groups and individuals, business accounted for 39.35 percent of the total (credit insurance, which may be purchased by either individuals or groups, is excluded, but accounted for just 1 percent of the total in force in Ohio). The overall share allocated to business amounts to 45.1 percent.

¹See <http://urban.csuohio.edu/research/ohiomanufacturing.htm>.

Individual Income Tax – A share of personal income tax is paid on business income from S Corporations, sole proprietorships, limited liability companies and other “pass-through” entities. Sobul estimates the business share at about 10 percent.

Motor Vehicle Fuel Tax – The Ohio Department of Taxation reports that 22 percent of taxable gallons in fiscal 2002 and 2003 were “special fuels,” 99 percent of which was diesel fuel used largely by trucks. Separately, Automotive News reported that new vehicles registered by fleet customers accounted for 15.9 percent of the total in the first three months of 2002 and 18.6 percent in the same period of 2003. Applying this average of 17 percent to the remaining 78 percent, business is assigned an additional 13 percent of this tax. In total, business accounts for 35 percent of this tax.

State and Local Sales and Use Taxes – Hill used a 20 percent estimate for his study, based on previous reports. However, Raymond J. Ring Jr., a professor at the University of South Dakota, estimated the share of Ohio sales taxes paid by business at 34 percent in a 1999 study. The business share in his analysis also includes government and nonprofit organizations. Though Ring’s data are from 1989, others cite his estimates and we have used his higher figure for the business share of these taxes.

School District Income Tax – Sobul used a 6.3 percent figure.

Replacement Tire Fee – The same methodology was used as with the motor vehicle fuel tax.

Kilowatt Hour Tax – The allocation of this tax is based on usage. The PUCO provided figures covering the first 11 months of 2003, when commercial and industrial customers accounted for 68.4 percent of the total electricity sales (excluding street and highway lighting, which accounted for 0.5 percent of the total). Larger users pay this tax at a lower rate, so this somewhat overstates business’s contribution.

Natural Gas Consumption Tax – The allocation of this tax is based on usage. PUCO data for all of calendar 2003 indicate that commercial and industrial users accounted for 52.7 percent of total natural gas sales. This overstates the business share, because natural gas tax rates decline based on usage.

Municipal Income Tax – Sobul estimated the business share of this tax at 10 percent in 1992, and believes this remains a reasonable estimate. Data for calendar 2002 collections are based on preliminary figures from the Ohio Department of Taxation, covering communities that contributed more than 99 percent of the total the previous year.

Real Property Tax – The share of taxes paid by business is based on commercial, industrial, mineral and public utility real property taxes, deducting the 10 percent reduction under state law. The amount is for Tax Year 2001, collected in 2002, so that it is comparable to the other taxes in this analysis (for the same reason, Tax Year 2001 data were used for public utility personal property tax).

Lodging Tax – Based on travel expenditure information from D.K. Shifflet & Associates Ltd. available from the American Hotel & Lodging Association, business accounted for 55.3 percent of hotel room expenditures in 2002. The most recent data available on lodging tax revenues are for calendar year 2001 (The same is true of the Admissions Excise Tax. However, these two taxes together accounted for just \$114 million that year, or a tiny fraction of the total collected. Collections of both declined in 2001 from the year before).

Motor Vehicle License Tax – Following Hill’s study, this one does not allocate the Motor Vehicle License tax between business and individuals. Though some data are available, calculating a breakdown for this tax was beyond the scope of this report.