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Effective Marginal Tax Rates for Low- and Moderate-Income Workers in 2016

Panel organized by the Department of Health and Human Services,
Office of the Assistant Secretary for Planning and Evaluation, and
Institute for Research on Poverty at the University of Wisconsin

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The **marginal tax rate** is the percentage of an additional dollar of earnings that is unavailable to an individual because it is paid in taxes or offset by reduced benefits from government programs.

Marginal tax rates affect incentives to work.

Hypothetical Example

As an example, imagine a taxpayer who is a **single parent** in **Pennsylvania** with **income only from wages**.

That person's after-tax income and marginal tax rates would include the effects of:

- Federal and state income taxes,
- Payroll taxes, and
- Means-tested transfers: the Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), cost-sharing subsidies for health insurance, Medicaid, and the Children's Health Insurance Program (CHIP).

Earnings and After-Tax Income for a Hypothetical Single Parent With One Child, 2016



Marginal Tax Rate for a Hypothetical Single Parent With One Child, 2016

Tax Rate (Percent)



Simulation Results

CBO's **microsimulation tax model** is used to estimate the distribution of marginal tax rates among workers under age 65 with incomes below 450 percent of the federal poverty level.

The **distribution of marginal tax rates** depends on the distribution of income, the extent of taxpayers' participation in means-tested programs, and demographic characteristics of the population.

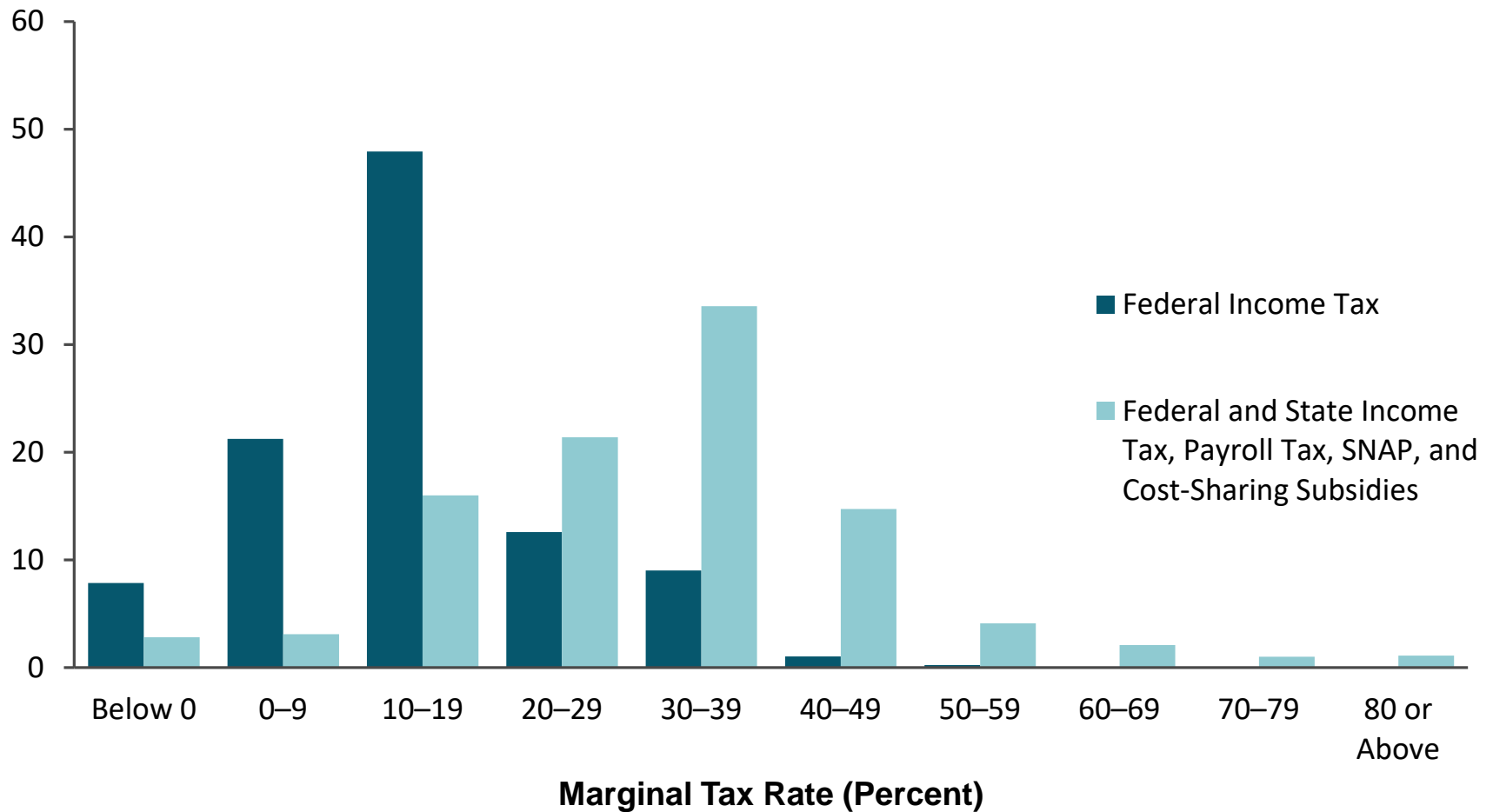
The microsimulation tax model is based on the Internal Revenue Service's **Statistics of Income public-use tax file**.

Tax returns are statistically matched to data from the **Annual Social and Economic Supplement to the Current Population Survey**.

The model includes a module to **simulate SNAP eligibility and benefits**.

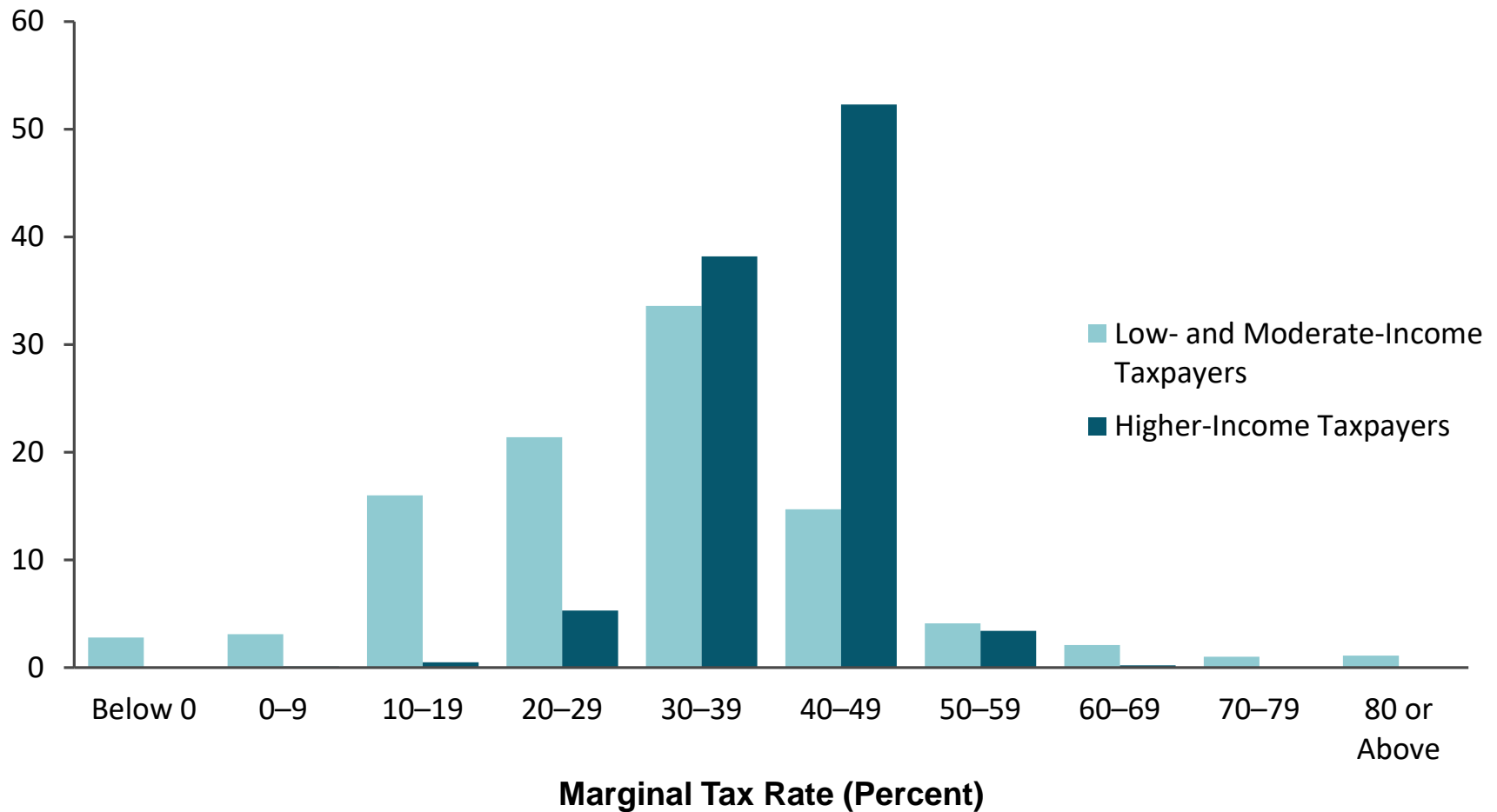
Marginal Tax Rates for Low- and Moderate-Income Taxpayers, 2016

Percent



Marginal Tax Rates for All Taxpayers, 2016

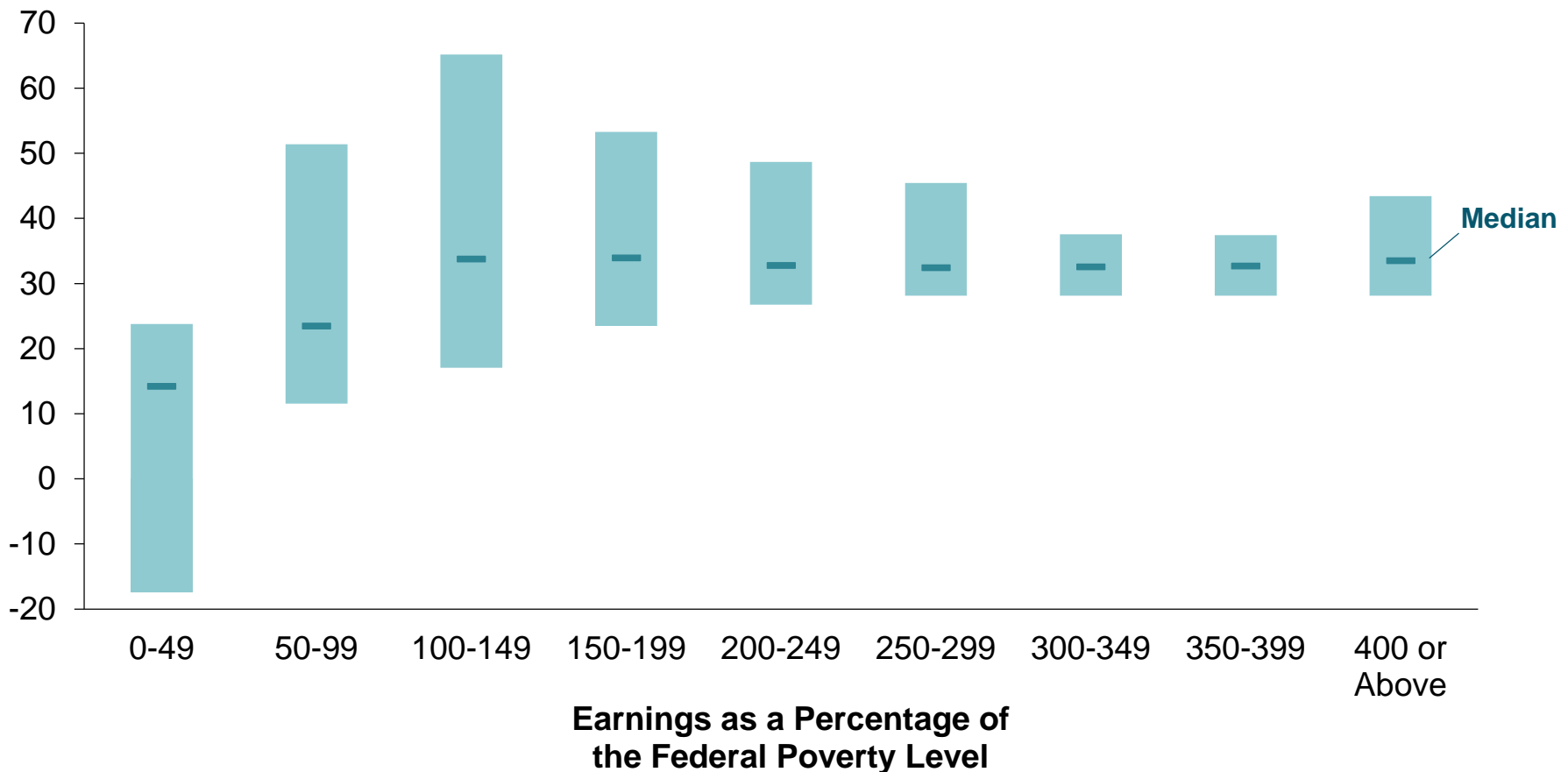
Percent



The marginal tax rates include the combined effects of federal and state income taxes, federal payroll taxes, and benefits from SNAP and cost-sharing subsidies for health insurance, generally on the basis of 2016 law.

Range of Marginal Tax Rates Between the 10th and 90th Percentiles for Low- and Moderate-Income Taxpayers, by Earnings Group, 2016

Percent



The marginal tax rates include the combined effects of federal and state income taxes, federal payroll taxes, and benefits from SNAP and cost-sharing subsidies for health insurance, generally on the basis of 2016 law.

Contributions of Tax Provisions and Benefits to Marginal Tax Rates for Low- and Moderate-Income Taxpayers, Weighted by Taxpayer, 2016

| | Share of Taxpayers Affected (Percent) | Marginal Rate Effect for Those Affected (Percent) | Contribution to Total Marginal Rate (Percentage points) |
|--|--|---|---|
| Federal Payroll Taxes | 99.0 | 14.0 | 13.9 |
| Federal Individual Income Taxes | 96.6 | 11.6 | 11.2 |
| Marginal statutory rate | 96.5 | 9.3 | 9.0 |
| EITC | 28.2 | 3.7 | 1.0 |
| Child tax credit | 30.2 | -7.0 | -2.1 |
| Premium assistance tax credit | 9.4 | 12.3 | 1.2 |
| Alternative minimum tax | 0.1 | 27.8 | 0 |
| State Individual Income Taxes | 60.0 | 4.4 | 2.6 |
| SNAP | 20.8 | 14.3 | 3.0 |
| Cost-Sharing Subsidies for Health Insurance | 7.1 | 9.5 | 0.7 |
| Interactions Among Tax Provisions | 17.1 | -0.6 | -0.1 |
| Average Marginal Tax Rate (Percent) | | | 31.3 |

Contributions of Tax Provisions and Benefits to Marginal Tax Rates for Low- and Moderate-Income Taxpayers, Weighted by Earnings, 2016

| | Share of Earnings Affected (Percent) | Marginal Rate Effect for Those Affected (Percent) | Contribution to Total Marginal Rate (Percentage points) |
|---|--------------------------------------|---|---|
| Federal Payroll Taxes | 99.2 | 13.9 | 13.8 |
| Federal Individual Income Taxes | 97.9 | 15.6 | 15.3 |
| Marginal statutory rate | 97.7 | 12.1 | 11.9 |
| EITC | 17.3 | 10.8 | 1.9 |
| Child tax credit | 45.8 | -4.3 | -2.0 |
| Premium assistance tax credit | 8.9 | 13.2 | 1.2 |
| Alternative minimum tax | 0.2 | 27.8 | 0.1 |
| State Individual Income Taxes | 69.7 | 4.8 | 3.4 |
| SNAP | 13.6 | 11.2 | 1.5 |
| Cost-Sharing Subsidies for Health Insurance | 5.7 | 10.1 | 0.6 |
| Interactions Among Tax Provisions | 30.3 | -0.7 | -0.2 |
| Average Marginal Tax Rate (Percent) | | | 34.3 |