

# ILLINOIS FEDERAL INCOME TAXES

## By Occupation, 2011-2013



Frank Manzo IV, MPP  
*Policy Director*

**Illinois Economic Policy Institute**  
[www.illinoisepi.org](http://www.illinoisepi.org)  
(708) 375-1002

## ILLINOIS FEDERAL INCOME TAXES: BY OCCUPATION, 2011-2013

### ILEPI Economic Commentary #8

#### INTRODUCTION

This ILEPI Economic Commentary compares the effective federal income tax rates of Illinois workers by occupation. America’s federal income tax is intended to ensure fairness, placing larger burdens of taxation on those with the highest ability to pay. Various tax credits, loopholes, and accounting tactics, however, challenge the actual progressivity of the system in practice. This Economic Commentary finds five key takeaways for Illinois workers:

1. The majority of workers in Illinois (60 percent) pay federal income taxes;
2. The average effective federal income tax rate for all Illinois workers is 12.9 percent (but 20.5 percent for only those workers with any federal income tax liability);
3. The average effective income tax rate is 16.8 percent for CEOs of Illinois firms and 17.8 percent for the rich;
4. Teachers pay an average effective federal income tax rate of 22.2 percent (the average for all public sector workers in Illinois is 16.7 percent); and
5. Despite earning significantly less money, many workers in Illinois— such as registered nurses, community and social services workers, and employees in sales occupations— face similar average tax rates as CEOs and the rich.

#### DATA SOURCE: CURRENT POPULATION SURVEY

All data utilized in this Economic Commentary are from the Current Population Survey (CPS). The CPS is a monthly survey of 60,000 randomly-selected households across America, sponsored jointly by the Census Bureau and the U.S. Bureau of Labor Statistics. Data are collected through personal and telephone interviews of the civilian non-institutionalized population 16 years and older, and weights are provided to match the survey sample to the overall American population. U.S. Department of Labor estimates on the unemployment rate and on a wide range of employment and earnings factors are all derived from the CPS. State and federal taxes, both before and after credits and deductions, are imputed by the Census Bureau using an improved technical model outlined in two 2006 papers (O’Hara, 2006; HHESD, 2006). All data was extracted from the Integrated Public Use Microdata Series (IPUMS-CPS) project by the Minnesota Population Center at the University of Minnesota (King et al., 2010).

Figure 1 reveals that there were 18,833 total respondents to the CPS who were 16 years or older and resided in Illinois from 2011 through 2013, including 6,080 individuals in 2013. Of this sample, 8,460 were employed at the time of survey completion, including 2,745 workers in the most recent year. The weighted employed population— i.e., the estimated number of people with a job— in Illinois was between 5.93 million and 6.00 million workers for all three years.

*Figure 1: Current Population Survey Respondents by Survey Year, Illinois, 2011-2013*

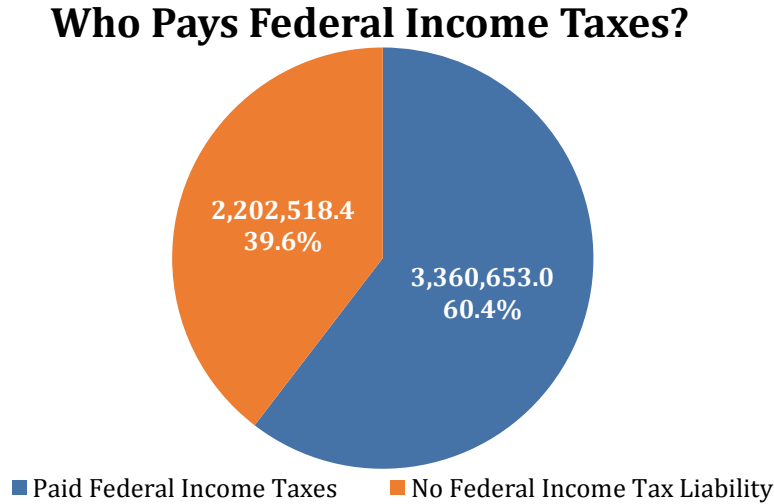
Year	Total Sample	Employed Sample	Weighted Total Population	Weighted Employed Population
2011	6,287	2,794	12,792,410	5,997,044
2012	6,466	2,921	12,710,660	5,931,034
2013	6,080	2,745	12,736,961	5,940,648

*Source: Author’s analysis of the Current Population Survey from the Integrated Public Use Microdata Series from the University of Minnesota (IPUMS-CPS). Data include 18,833 observations of persons 16 years and older in Illinois and 8,460 observations of employed persons 16 years and older in 2011, 2012, and 2013. Estimates are weighted to match the actual population.*

## WHO PAYS FEDERAL INCOME TAXES IN ILLINOIS?

The majority of workers in Illinois pay federal income taxes (Figure 2). Approximately 3.36 million Illinois workers paid federal income taxes each year from 2011 through 2013 (60.4 percent). On the other hand, 2.20 million workers in Illinois had no federal income tax liability (39.6 percent). Many of these workers instead received government assistance, primarily through the Earned Income Tax Credit.

*Figure 2: Share of Illinois Workers Paying Federal Income Taxes, 2011-2013*



*Source: Author's analysis of the Current Population Survey from the Integrated Public Use Microdata Series from the University of Minnesota (IPUMS-CPS). Data include 7,905 observations of employed persons 16 years and older with imputed tax information in 2011, 2012, and 2013. Estimates are weighted to match the actual population.*

## EFFECTIVE FEDERAL TAX RATES BY OCCUPATION

Figure 3 displays the average effective federal income tax rates for Illinois workers by occupation in 2011, 2012, and 2013. Statewide, the average Illinois worker experienced an effective federal income tax rate of 12.9 percent (Figure 3). Note that the average rates in Figure 3 *include* those who paid no federal income taxes. The rates would be even higher if these workers were excluded: the after-credit statewide average of only those workers with any federal income tax liability was 20.5 percent, higher than the 18.1 percent national average estimated by the Congressional Budget Office (CBO, 2013).

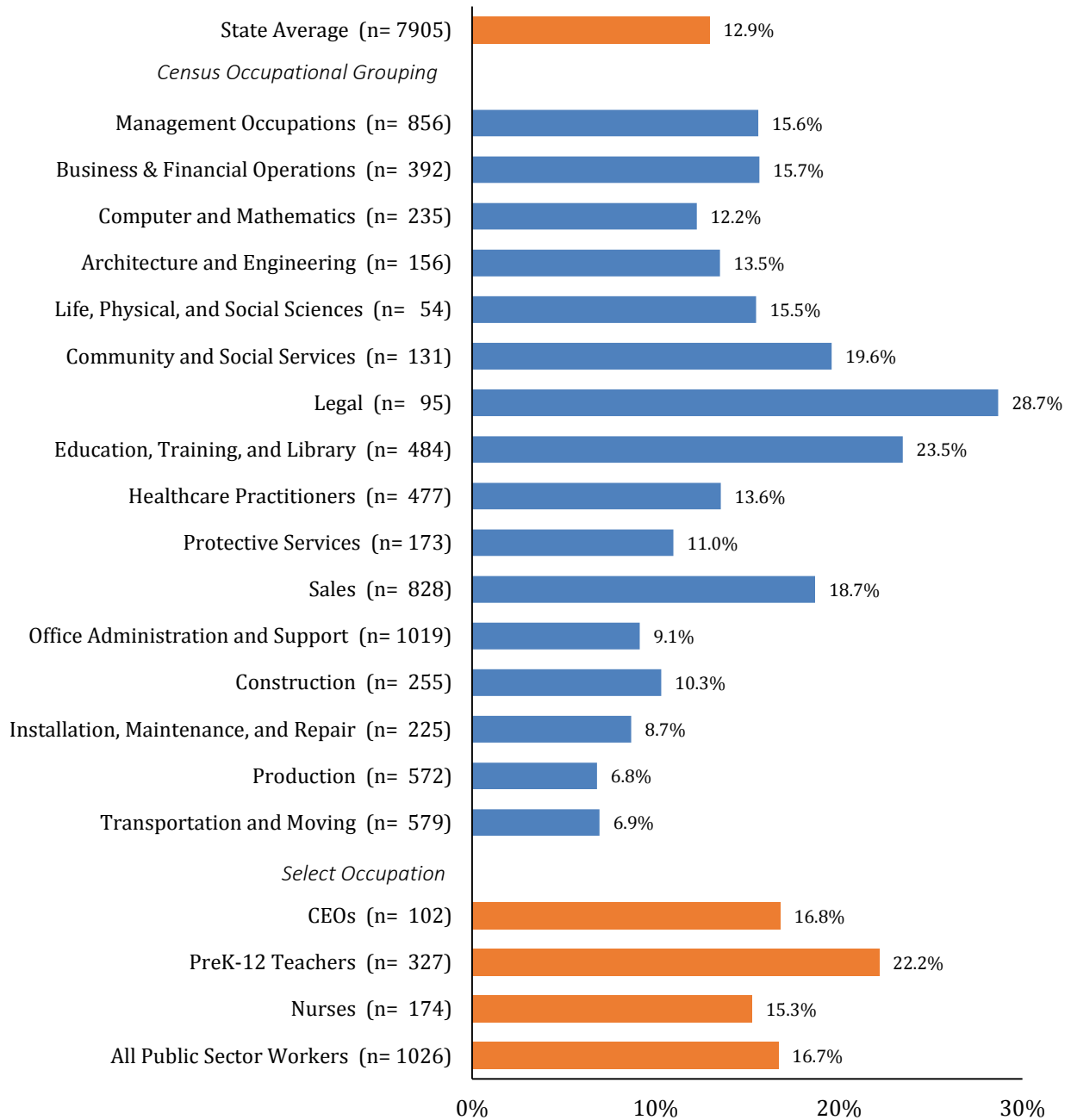
The five occupation groups— as defined by the Census Bureau— with the highest average federal income tax burdens are: legal occupations (28.7 percent); education, training, and library occupations (23.5 percent); community and social services occupations (19.6 percent); sales occupations (18.7 percent); and business and financial operations occupations (15.7 percent). The average CEO of an Illinois company pays just 16.8 percent of his or her annual income in federal income taxes. This average tax burden is far lower than the 22.2 percent rate experienced by preschool through high school teachers and about the same as the 16.7 percent average effective federal income tax rate for *all* public sector workers. Public sector workers, as a whole, pay significantly more than the 12.9 percent statewide mean for all workers (Figure 3).

Illinois teachers confront perhaps the most onerous federal income tax burden. Although workers in legal occupations contributed 28.7 percent of their incomes toward federal income taxes from 2011 through 2013, they earned an average of \$155,515 in annual wage and salary income (in constant 2013 dollars). Teachers, meanwhile, earned just \$47,207 on average but paid 22.2 percent of their incomes in federal taxes. Extending the analysis out to include all workers in the education, training, and library occupational group (such as university professors and librarians), the effective tax rate is 23.5 percent (Figure 4). By contrast,

CEOs of all firms earned \$166,631 on average but paid just 16.8 percent in federal income taxes and workers earning \$250,000 or more paid just 17.8 percent in effective federal income taxes on average.

Figure 3: Effective Federal Income Tax Rates by Occupation in Illinois, 2011-2013

### Effective Federal Income Tax Rates, 2011-2013



Source: Author's analysis of the Current Population Survey from the Integrated Public Use Microdata Series from the University of Minnesota (IPUMS-CPS). Data include 7,905 observations of employed persons 16 years and older with imputed tax information in 2011, 2012, and 2013. Estimates are weighted to match the actual population.

Despite earning significantly less money, many workers in other occupations experience federal income tax burdens similar to the rich in Illinois. While CEOs and individuals earning at least \$250,000 respectively paid 16.8 percent and 17.8 percent in effective federal income taxes, workers in community and social

services jobs earned just \$42,247 in annual income but paid 19.6 percent in federal taxes. Registered nurses earned \$58,629 on average but paid 15.3 percent in federal taxes. Workers in sales occupations—which range from cashiers to salespersons to travel agents—made \$42,956 but paid 18.7 percent. The mean tax rate for workers in business and financial operations jobs, as another example, was 15.7 percent despite an average annual income of \$70,193—indicating that many CEOs in Illinois’ financial industry likely pay about the same tax rate as their employees.

*Figure 4: Average Worker Income and Effective Federal Income Tax Rates by Occupation, 2011-2013*

Occupation	Wage and Salary Income (2013 \$)	Effective Federal Income Tax Rate	Sample
Statewide Average	\$47,653	12.9%	7,905
<i>Census Occupational Grouping</i>			
Management Occupations	\$81,156	15.6%	856
Business and Financial Operations	\$70,193	15.7%	392
Computer and Mathematics	\$73,444	12.2%	235
Architecture and Engineering	\$72,691	13.5%	156
Life, Physical, and Social Sciences	\$116,558	15.5%	54
Community and Social Services	\$42,247	19.6%	131
Legal	\$155,515	28.7%	95
Education, Training, and Library	\$43,379	23.5%	484
Healthcare Practitioners	\$68,042	13.6%	477
Protective Services	\$54,741	11.0%	173
Sales	\$42,956	18.7%	828
Office Administration and Support	\$32,447	9.1%	1,019
Construction	\$44,599	10.3%	255
Installation, Maintenance, and Repair	\$45,042	8.7%	225
Production	\$39,548	6.8%	572
Transportation and Moving	\$30,506	6.9%	579
<i>Select Occupation</i>			
CEOs	\$166,631	16.8%	102
PreK-12 Teachers	\$47,207	22.2%	327
Nurses	\$58,629	15.3%	174
All Public Sector Workers	\$47,947	16.7%	1,026
Wage and Salary Income: \$250,000 or more	\$250,000+	17.8%	99

*Source: Author’s analysis of the Current Population Survey from the Integrated Public Use Microdata Series from the University of Minnesota (IPUMS-CPS). Data include 7,905 observations of employed persons 16 years and older with imputed tax information in 2011, 2012, and 2013. Estimates are weighted to match the actual population.*

## CONCLUSION AND POLICY IMPLICATIONS

Illinois is experiencing the impact of significant loopholes and tax credits at the federal income tax level.

This Economic Commentary has produced five key takeaways:

1. The majority of workers in Illinois (60 percent) pay federal income taxes;
2. The average effective federal income tax rate for all Illinois workers is 12.9 percent (but 20.5 percent for only those workers with any federal income tax liability);
3. The average effective income tax rate is 16.8 percent for CEOs of Illinois firms and 17.8 percent for the rich;

4. Teachers pay an average effective federal income tax rate of 22.2 percent (the average for all public sector workers in Illinois is 16.7 percent); and
5. Despite earning significantly less money, many workers in Illinois— such as registered nurses, community and social services workers, and employees in sales occupations— face similar average tax rates as CEOs and the rich.

As CEOs and the rich pay between only 17 and 18 percent in federal income taxes, the burden is shifted from those with the greatest ability to pay onto the backs of working men and working women. Many teachers, nurses, lawyers, social workers, cashiers, and scientists are contributing more of their incomes to the federal budget while earning less. Ultimately, when CEOs and individuals earning greater than \$250,000 a year do not pay a fair share, either the federal deficit increases or rates must be raised for all other workers. Steps must be taken in Congress to close wasteful credits and loopholes.

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