

## **Taxes Paid by Immigrants in Illinois**

A Technical Paper Produced for the Illinois Immigrant Policy Project

by

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## I. INTRODUCTION AND SUMMARY

This study estimates taxes paid by immigrants in Illinois in 1994 by combining data from the March 1994 Current Population Survey (CPS), the 1990 Census, administrative records from the State of Illinois, and data from the Immigration and Naturalization Service (INS) on legal and illegal immigration. We produce estimates for the following taxes:

- Federal income tax,
- Illinois state income tax,
- FICA and Railroad Retirement,
- State and local sales tax,
- Residential property tax, and
- Unemployment insurance payments.

We apportion our estimates of taxes paid among the following groups:

- Refugees entering the United States in 1980 or later,
- Other legal immigrants entering the United States in 1980 or later,
- Undocumented immigrants,
- Legal immigrants entering the United States before 1980, and
- Natives.

Whether immigrants take more out of government coffers than they contribute is a much debated, but under researched, issue. Most of the debate has focused on estimating how much immigrants use in government services, while the amount immigrants pay in taxes is either ignored or given cursory examination. Yet, without adequate estimates of taxes paid, analysis of fiscal impacts of immigrants is incomplete and biased toward showing that immigrants are a fiscal burden.

In this research, we avoid two pitfalls that affect many other studies of fiscal impacts. First, we include both long-term immigrants and more recent entrants. Since the economic position of immigrants improves as their time in the United States increases, ignoring long-term immigrants leads to underestimates of immigrants' tax contributions. Second, among recent immigrants we distinguish among broad categories of immigrant admissions, because tax contributions and use of government services vary significantly according to legal status at entry. To develop intelligent policies toward immigrants, it is necessary to acknowledge and understand how various immigrant groups differ in their contributions to and demands on government coffers.

### Summary of Results

Table 1 summarizes estimates of taxes paid by immigrants and natives in Illinois. We estimate that immigrants in Illinois paid **\$7.2 billion** in taxes for 1994, accounting for

10.6 percent of these taxes collected, or slightly more than the 10.2 percent of the total population represented by immigrants.

**Table 1. Taxes Collected from Immigrants in Illinois,  
by Type of Tax: 1994**

(Taxes in millions of dollars)

Tax or Population	Paid by Immigrants	Total Collected	Pct. from Immigrants
Total of 7 taxes	7,196	67,635	10.6
Federal income	2,745	26,227	10.5
State income	535	4,911	10.9
State sales	487	4,817	10.1
Local sales	291	2,303	12.6
Residential property	614	6,024	10.2
Social Security	2,325	21,703	10.7
Unemployment	199	1,650	12.1
Population	1,210	11,868	10.2

Source: Urban Institute estimates. Table 4.

For federal and state income taxes, state sales tax, residential property tax, and Social Security taxes, immigrants pay roughly the same proportion of tax as they represent in the population. They pay a higher percentage of unemployment taxes (12.1 percent) than they represent of the population because they are overrepresented in covered employment (e.g., private, nongovernmental employment) and this tax is regressive in that income above a certain level is not taxed. The higher percentage of local sales tax from immigrants (12.6 percent) is a consequence of their concentration in the Chicago area, which has a higher local tax rate than most Illinois localities.

The largest two of the taxes by far, the federal income tax and Social Security tax, are collected by the federal government, so that about 70 percent of these revenues flow to the federal government. For natives, 71 percent of these revenues flow to the federal government. Thus, although the revenue flows are not balanced, there is little difference between the situation of immigrants and that of natives.

The bulk of taxes collected from immigrants is from long-term (i.e., pre-1980) legal immigrants. This group is the largest group of immigrants and has by far the highest *per capita* income. In fact, long-term immigrants have substantially higher *per capita* incomes than natives, in part because of differences in educational attainment and other characteristics, but mainly because of age structure differences. The long-term population has very few children and a much higher concentration of prime earning age individuals than does the native population. The collections by population group, together with incomes, are shown in Table 2.

**Table 2. Taxes Collected by Immigrant Type in Illinois, 1994**

(Taxes in millions of dollars)

Population Group	Taxes Paid	Percent of Total		Per Capita Income (\$)
		Taxes	Population	
Total of 7 taxes	6,370	100.0	100.0	16,819
Natives	2,745	89.4	89.8	16,790
Immigrants	487	10.6	10.2	17,076
Long-term legal	614	6.8	4.2	25,747
Legal, 1980-1994	2,325	2.7	3.6	13,020
Refugees, 1980-1994	199	0.3	0.4	13,437
Undocumented	1,210	0.8	2.1	7,327

Source: Urban Institute estimates. Table 4.

### Overview of Methods

The taxes collected from each demographic group were estimated as the product of *per capita* taxes paid by group members and the estimated population in each group. Because it is not possible to determine the legal status of individual immigrants in either the CPS or the Census, we used a variation of the methodology previously used in our Office of Management and Budget (OMB) report and other research (Clark 1994; Clark et al. 1994; Fix and Passel 1994) to create "proxy populations" for the three recent immigrant groups. The proxy populations are the major country-of-birth/period-of-entry cohorts within each immigrant type living in Illinois, chosen so that most of the members of the proxy populations are either members of or have characteristics similar to the immigrant group in question.

For each tax, we estimated the amount paid by each immigrant group by multiplying the estimated number of immigrants in the group by the estimated *per capita* tax paid by the proxy population.

We used three principal data sources to estimate taxes paid. The March 1994 Current Population Survey provided the basic data for our initial estimates. The CPS is a monthly survey of approximately 57,000 households designed primarily to gather data on employment, unemployment, and demographic characteristics (U.S. Bureau of the Census 1990:2-1). The survey includes occasional special purpose supplements. For the tax estimation procedures we used the annual March CPS Social and Economic Characteristics Supplement. For this project, we used only the approximately 2,500 households from Illinois. For estimates of taxes paid by the foreign-born population, we also employed the 5-percent Public Use Microdata Sample (PUMS) from the 1990 Census, which includes more than a half million individuals drawn from the 1990 Census for Illinois; we used only those households containing one or more foreign-born individuals. For some of the estimates for natives, we also used the entire 1-percent PUMS consisting of approximately 110,000 individuals from the 1990 Census.

## *Tax Estimates*

Our initial estimates of taxes paid by each household were made by using the Urban Institute's TRIM2 (the **TR**ansfer **I**ncome **M**odel, Version 2), a microsimulation program that estimates tax liabilities by applying extremely detailed tax rules to individuals and families in the March supplement to the CPS. For example, to estimate federal income tax, TRIM2 fills out a tax form for each tax filing unit in the CPS sample. TRIM2 was used to estimate federal and state income taxes, FICA payments, and unemployment insurance payments (Giannarelli 1992). Local property taxes drew principally on data from the 1990 Census, while state and local sales taxes were based on a simple household expenditure model.

Although the CPS is a large survey, the number of sample cases in Illinois is limited — only 6,152 individuals, of whom only 674 are foreign-born — so that there are not enough households containing recent immigrants to yield stable estimates. We therefore combined the TRIM2 estimates with 1990 Census data for the proxy populations in a two-step process. We started by developing multivariate models of tax obligations using data from the 1994 CPS and TRIM2. These models are scaled-back versions of the TRIM2 tax simulations that use only variables available in both the 1994 CPS and the 1990 Census.

The TRIM2-based models were applied to individual households from the 1990 Census with incomes updated to 1994. We used immigrants from selected countries to model taxes paid by each recent immigrant group. For example, for refugees, we selected individuals in the 1990 Census from the major countries of origin that contribute refugees to Illinois. We reweighted these individuals so that the number of refugees from each major refugee-sending country in the proxy population exactly matches the number of refugees from that country among refugees in Illinois. The estimates for each population group were combined to yield an estimate of total taxes for the state. This estimate was compared with an administrative total. Any necessary adjustments (usually small) were made to bring the CPS-Census estimate in line with the total taxes collected.

The same proxy population procedure was followed for property and sales taxes, but these estimates were developed principally from the 1990 Census, with appropriate adjustments to update the income and tax estimates to 1994. Specifically, the Census data on property taxes paid by owners and rent paid by renters provided the raw material for property tax estimates. For sales taxes, the total income of the household was reduced first by the income, property, and FICA taxes paid by the household. Then housing costs (including mortgage, rent, and utilities), as reported in the Census, were subtracted, as was an allowance for food and other non-taxable items. The estimate of state and local sales taxes paid was calculated on the basis of the remaining amount of disposable income. The household estimates were combined into the proxy populations, as above, and then further adjusted to agree with administrative totals.

## *Population Estimates*

Estimates of the number of natives and long-term immigrants (i.e., those who entered the United States before 1980) were derived directly from the March 1994 CPS tabulations for the state of Illinois. For the post-1980 immigrant populations, we developed analytic estimates from various sources, principally from INS data. Refugees include all persons admitted as refugees during 1980–1994 who subsequently adjusted their status to legal permanent resident (LPR) and

who reported Illinois as their intended state of residence. An allowance was made for those who had not adjusted by March 1994. The estimates relied on tabulations by age, sex, country of birth, date of entry, and entry status from public-use microdata records of the INS. The estimates included allowances for mortality, emigration, and internal migration (to and from other states). We estimate that in March 1994, 49,500 persons admitted as refugees in 1980 or later lived in Illinois (Table 3).<sup>1</sup>

**Table 3. Estimate of Proxy Populations for Legal Immigrants, Refugees, and Undocumented Immigrants, by Period of Entry: Illinois, March 1994**

(Populations in thousands)

Legal Immigrants, 1980-1994				Refugees, 1980-1994				Undocumented Immigrants			
Country of Birth	Estimate		Proxy Pct.	Country of Birth	Estimate		Proxy Pct.	Country of Birth	Estimate		Proxy Pct.
	Number	Pct.			Number	Pct.			Number	Pct.	
Total	423.0	100.0	100.0	Total	49.5	100.0	100.0	Total	244.1	100.0	100.0
Mexico	143.3	33.9	39.5	Cuba	1.2	2.3	(x)	Mexico	138.8	56.9	69.2
Other Central America	16.7	4.0	(x)	Cambodia	2.5	5.0	6.2	Other Central America	14.8	6.1	7.4
India	37.2	8.8	10.3	Laos	5.3	10.8	13.3	Philippines	5.4	2.2	(x)
Philippines	29.1	6.9	8.0	Vietnam	8.1	16.4	20.4	Other Asia	4.6	1.9	(x)
Asia & Mid. East	84.6	20.0	23.3	Iran	1.1	2.2	(x)	Middle East	3.3	1.3	(x)
Korea	17.9	4.2	—	Iraq	2.4	4.8	(x)	Poland	47.0	19.3	23.4
Other Asia	50.7	12.0	—	Poland	6.4	12.9	15.9	Other Europe	11.8	4.8	(x)
Middle East	16.0	3.8	—	Romania	5.5	11.1	13.8	All Other	18.4	7.5	(x)
Poland	45.8	10.8	12.6	U.S.S.R.	12.2	24.6	30.4				
Other Europe	22.3	5.3	6.2	All Other	4.9	10.0	(x)				
All Other	43.9	10.4	(x)								

(x) dropped from calculation of proxy populations. — included in total for region.

For all other legal immigrants entering after 1980, three principal categories of admissions of persons living in Illinois were initially included (by age, sex, country of birth, and period of entry): (1) LPRs other than refugees; (2) aliens legalizing under the 1986 Immigration Reform and Control Act (IRCA) who reported living in the country since 1982; and (3) IRCA legalizations of Special Agricultural Workers (SAWs). These initial populations were adjusted for mortality, emigration, and internal migration, and small additions were made for foreign students and other nonimmigrants living in Illinois. An estimated 423,000 legal immigrants who came to the United States between 1980 and 1994 lived in Illinois in March 1994.

For undocumented immigration, we initially used Warren's (1994) estimate for 1992 extrapolated to 1994. However, comparison with the March 1994 CPS suggested that Warren's estimate for undocumented Mexicans living in Illinois was too low. Accordingly, we averaged Warren's estimate for undocumented Mexicans with the CPS-based estimate. Our final estimate is that 244,100 undocumented immigrants were living in Illinois as of March 1994.

We estimate that there were 1,209,500 immigrants in Illinois in March 1994, comprising 10.2 percent of the total state population of 11,867,600. There were 10,658,000 natives. Taken

<sup>1</sup> The Refugee and Immigrant Services section of the Illinois Department of Public Aid estimates that the number of refugees in Illinois is higher than indicated by the INS annual data tapes. They estimate that approximately 75,000 refugees who entered the United States between 1980 and 1994 reside in Illinois (Silverman 1996).



together, the three groups of recent immigrants (post-1980 legal, post-1980 refugees, and undocumented immigrants) account for 716,600 persons — 59 percent of all immigrants, but only 6 percent of the total population.

### *Proxy Populations*

The proxy populations are estimates within each of the three recent immigrant populations. Initially, we chose the countries accounting for the largest numbers of immigrants of each type. After producing the population estimates described above, we limited the proxy countries to those accounting for 5 percent or more of the population group. The final sets of proxy countries are:

<u>Post-1980 Legal Immigrants</u>	<u>Refugees</u>	<u>Undocumented Immigrants</u>
Mexico	U.S.S.R.	Mexico
Poland	Vietnam	Poland
India	Poland	Central America
Philippines	Romania	
Other Asia	Laos	
Western Europe	Cambodia	

*Per capita* incomes and taxes were estimated for each of these countries of birth and weighted according to the population estimates to yield estimates for the different population groups. Because only the proxy countries were used in the weighting process, the weights had to be adjusted slightly to give the proper aggregate total populations.<sup>2</sup>

### **Report Outline**

The next two sections of the report describe in detail the estimation methods and results. Although the population estimates would logically be the first to be described, they are delayed until Section III because the tax methods in Section II are substantively more interesting. For readers who wish to understand the population estimation methodology before reading about the tax methods, the sections may be read in reverse order. The tax estimation section of the report summarizes the various estimates and comparisons with administrative figures, and investigates the key underlying assumptions and the sensitivity of the estimates.

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<sup>2</sup> For example, for post-1980 legal immigrants, immigrants from the proxy countries — Mexico, Poland, India, the Philippines, Other Asia, and Western Europe — make up 85.7 percent of the immigrant group. To make the number of individuals in the proxy population equal the actual total number of post-1980 legal immigrants, the weight for each individual in the proxy population must be inflated by 16.7 percent ( $1 - (100 / 85.7)$ ).

## II. ESTIMATES OF TAXES PAID

### Overview of Estimation Strategy

Estimates of federal and state income taxes, unemployment insurance payments, and FICA (Social Security) taxes are based on estimates from the TRIM2, the *TRansfer Income Model Version 2*, a microsimulation computer program. TRIM2 determines tax liability by applying the federal and state tax codes to individuals, families, and households in the March 1994 CPS (Giannarelli 1992).<sup>3</sup>

Estimates for natives and for immigrants who entered the United States before 1980 can be taken directly from TRIM2. Developing estimates for immigrants who entered since 1980 was more difficult because the number of such immigrants in Illinois in the CPS is relatively small. The small sample size — only 674 foreign-born individuals — means that CPS estimates of the post-1980 immigrant population and their incomes for specific countries of birth, as well as the TRIM2 estimates of tax obligations, are subject to substantial sampling variability and may be unreliable. To overcome the limitations of small sample size, we developed simplified models of tax obligations using variables available in *both* the 1994 CPS and the 1990 Census. These models were applied to data from the 1990 Census, which contains much larger samples of recent immigrants to Illinois.

To overcome the small sample size limitations, for the three post-1980 immigrant groups (refugees, other legal immigrants, and undocumented aliens), our estimates are based on both the TRIM2 estimates and 1990 Census data. For comparability, we also developed estimates for natives and long-term immigrants (i.e., pre-1980) using the models and 1990 Census data. The differences between the CPS- and Census-based estimates are negligible for natives and long-term immigrants. Property and sales tax models use data available only from the 1990 Census. The final estimates using 1990 Census data and CPS-based models are shown in detail in Tables 4a and 4b.

### *Mapping the March 1994 CPS into the 1990 Census*

To use the 1990 Census data for estimating tax liability as would be derived from the March 1994 CPS, some transformations had to be made in the 1990 data. The answers to two major questions were needed:

- (1) Which 1990 Census populations correspond to the different immigrant groups defined in 1994?
- (2) What is the relationship between the incomes reported in the 1990 Census (actually 1989 incomes) and those reported in the March 1994 CPS (actually 1993) incomes?

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<sup>3</sup> TRIM2 can also estimate eligibility for various benefit programs. The eligibility rules used by TRIM2 do not take into account nativity, citizenship, or whether an individual is legally residing in the United States. Consequently, we are unable to use TRIM2 to estimate expenditures on social programs for immigrants.

